contain recommendations for remedial work when appropriate, and will be transmitted through the Division Engineer for review and to HQDA (DAENCWE) WASH DC 20314 for review and approval. For structures incurring no damage a simple statement to this effect will be all that is required in the report, unless seismic instrumentation at the project is activated. (See paragraph (h)(4) of this section.)

(g) Training. The dam safety training program covered by paragraph 6 of ER 1130-2-419 should include post-earth-quake inspections and the types of damage operations personnel should

look for.

(h) Responsibilities. (1) The Engineering Divisions of the District offices will formulate the inspection program, conduct the post-earthquake inspections, process and analyze the data of instrumental and other observations, evaluate the resulting condition of the structures, and prepare the inspection reports. The Engineering division is also responsible for planning special instrumentation felt necessary in selected structures under this program. Engineering Division is responsible for providing the training discussed in paragraph (g) of this section.

(2) The Construction Divisions of the District offices will be responsible for the installation of the earthquake instrumentation devices and for data collection if an earthquake occurs during

the construction period.

(3) The Operations Division of the District offices will be responsible for the immediate assessment of earthquake damage and notifying the Chief, Engineering Division as discussed in paragraphs (f)(1) and (2). The Operations Division will also be responsible for earthquake data collection after the construction period in accordance with the instrumental observation programs, and will assist and participate in the post-earthquake inspections.

(4) The U.S. Geological Survey has the responsibility for servicing and collecting all data from strong motion instrumentation at Corps of Engineers dam projects following an earthquake occurrence. However, the U.S. Army Waterways Experiment Station (WES) is assigned the responsibility for analyzing and interpreting these earth-

quake data. Whenever a recordable earthquake record is obtained from seismic instrumentation at a Corps project, the Division will send a report of all pertinent instrumentation data to the Waterways Experiment Station, ATTN: WESGH, P.O. Box 631, Vicksburg, Mississippi 39180. The report on each project should include a complete description of the locations and types of instruments and a copy of the instrumental records from each of the strong motion machines activated. (Exempt from requirements control under paragraph 7–2v, AR 335–15).

(5) The Engineering Divisions of the Division offices will select structures for special instrumentation for earthquake effects, and will review and monitor the data collection, processing, evaluating, and inspecting activities. They will also be specifically responsible for promptly informing HQDA (DAEN-CWE) WASH DC 20314, when evaluation of the condition of the structure or analyses of the instrumentation data indicate the stability of a structure is questionable. (Exempt for requirements control under paragraph 7-20, AR 335-15.)

(6) Division Engineers are responsible for issuing any supplementary regulations necessary to adapt the policies and instructions herein to the specific conditions within their Division.

(i) Funding. Funding for the evaluation and inspection program will be under the Appropriation 96X3123, Operations and Maintenance, General. Funds required for the inspections, including Travel and Per Diem costs incurred by personnel of the Division ofice or the Office, Chief of Engineers, will be from allocations made to the various projects for the fiscal year in which the inspection occurs.

[44 FR 43469, July 25, 1979. Redesignated at 60 FR 19851, Apr. 21, 1995]

# § 222.5 Water control management (ER 1110-2-240).

(a) Purpose. This regulation prescribes policies and procedures to be followed by the U.S. Army Corps of Engineers in carrying out water control management activities, including establishment of water control plans for Corps and non-Corps projects, as required by Federal laws and directives.

- (b) *Applicability.* This regulation is applicable to all field operating activities having civil works responsibilities.
- (c) References. Appendix A lists U.S. Army Corps of Engineers publications and sections of Federal statutes and regulations that are referenced herein.
- (d) Authorities—(1) U.S. Army Corps of Engineers projects. Authorities for allocation of storage and regulation of projects owned and operated by the Corps of Engineers are contained in legislative authorization acts and referenced project documents. These public laws and project documents usually contain provisions for development of water control plans, and appropriate revisions thereto, under the discretionary authority of the Chief of Engineers. Some modifications in project operation are permitted under congressional enactments subsequent to original project authorization. Questions that require interpretations of authorizations affecting regulation of specific reservoirs will be referred to CDR USACE (DAEN-CWE-HW), WASH DC 20314, with appropriate background information and analysis, for resolution.
- (2) Non-Corps projects. The Corps of Engineers is responsible for prescribing flood control and navigation regulations for certain reservoir projects constructed or operated by other Federal, non-Federal or private agencies. There are several classes of such projects: Those authorized by special acts of Congress; those for which licenses issued by the Federal Energy Regulatory Commission (formerly Federal Power Commission) provide that operation shall be in accordance with instructions of the Secretary of the Army; those covered by agreements between the operating agency and the Corps of Engineers; and those that fall under the terms of general legislative and administrative provisions. These authorities, of illustrative examples, are described briefly in Appendix B
- (e) Terminology: Water control plans and reservoir regulation schedules. (1) Water control plans include coordinated regulation schedules for project/system regulation and such additional provisions as may be required to collect, analyze and disseminate basic data, prepare detailed operating instructions, assure project safety and

carry out regulation of projects in an appropriate manner.

(2) The term "reservoir regulation schedule" refers to a compilation of operating criteria, guidelines, rule curves and specifications that govern basically the storage and release functions of a reservoir. In general, schedules indicate limiting rates of reservoir releases required during various seasons of the year to meet all functional objectives of the particular project, acting separately or in combination with other projects in a system. Schedules are usually expressed in the form of graphs and tabulations, supplemented by concise specifications.

- (f) General policies. (1) Water control plans will be developed for reservoirs, locks and dams, reregulation and major control structures and interrelated systems to comform with objectives and specific provisions of authorizing legislation and applicable Corps of Engineers reports. They will include any applicable authorities established after project construction. The water control plans will be prepared giving appropriate consideration to all applicable Congressional Acts relating to operation of Federal facilities, i.e., Fish and Wildlife Coordination Act (Pub. L. 85-624), Federal Water Project Recreation Act-Uniform Policies (Pub. L. 89-72), National Environmental Policy Act of 1969 (Pub. L. 91-190), and Clean Water Act of 1977 (Pub. L. 95-217). Thorough analysis and testing studies will be made as necessary to establish the optimum water control plans possible within prevailing constraints.
- (2) Necessary actions will be taken to keep approved water control plans upto-date. For this purpose, plans will be subject to continuing and progressive study by personnel in field offices of the Corps of Engineers. These personnel will be professionally qualified in technical areas involved and familiar with comprehensive project objectives and other factors affecting water control. Organizational requirements for water control management are further discussed in ER 1110-2-1400.
- (3) Water control plans developed for specific projects and reservoir systems will be clearly documented in appropriate water control manuals. These

manuals will be prepared to meet initial requirements when storage in the reservoir begins. They will be revised as necessary to conform with changing requirements resulting from developments in the project area and downstream, improvements in technology, new legislation and other relevant factors, provided such revisions comply with existing Federal regulations and established Corps of Engineers policy.

- (4) Development and execution of water control plans will include appropriate consideration for efficient water management in conformance with the emphasis on water conservation as a national priority. The objectives of efficient water control management are to produce beneficial water savings and improvements in the availability and quality of water resulting from project regulation/operation. Balanced source use through improved regulation should be developed to conserve as much water as possible and maximize all project functions consistent with project/system management. Continuous examination should be made of regulation schedules, possible need for storage reallocation (within existing authority and constraints) and to identify needed changes in normal regulation. Emphasis should be placed on evaluating conditions that could require deviation from normal release schedules as part of drought contingency plans (ER 1110-2-1941).
- (5) Adequate provisions for collection, analysis and dissemination of basic data, the formulation of specific project regulation directives, and the performance of project regulation will be established at field level.
- (6) Appropriate provisions will be made for monitoring project operations, formulating advisories to higher authorities, and disseminating information to others concerned. These actions are required to facilitate proper regulation of systems and to keep the public fully informed regarding all pertinent water control matters.
- (7) In development and execution of water control plans, appropriate attention will be given to project safety in accordance with ER 1130-2-417 and ER 1130-2-419 so as to insure that all water impounding structures are operated for the safety of users of the facilities and

the general public. Care will be exercised in the development of reservoir regulation schedules to assure that controlled releases minimize project impacts and do not jeopardize the safety of persons engaged in activities downstream of the facility. Water control plans will include provisions for issuing adequate warnings or otherwise alerting all affected interests to possible hazards from project regulation activities.

(8) In carrying out water control activities, Corps of Engineers personnel must recognize and observe the legal responsibility of the National Weather Service (NWS), National Oceanic and Atmospheric Administration (NOAA), for issuing weather forecasts and flood warnings, including river discharges and stages. River forecasts prepared by the Corps of Engineers in the execution of its responsibilities should not be released to the general public, unless the NWS is willing to make the release or agrees to such dissemination. However, release to interested parties of factual information on current storms or river conditions and properly quoted NWS forecasts is permissible. District offices are encouraged to provide assistance to communities and individuals regarding the impact of forecasted floods. Typical advice would be to provide approximate water surface elevations at locations upstream and downstream of the NWS forecasting stream gages. Announcement of anticipated changes in reservoir release rates as far in advance as possible to the general public is the responsibility of Corps of Engineers water control managers for projects under their jurisdiction.

(9) Water control plans will be developed in concert with all basin interests which are or could be impacted by or have an influence on project regulation. Close coordination will be maintained with all appropriate international, Federal, State, regional and local agencies in the development and execution of water control plans. Effective public information programs will be developed and maintained so as to inform and educate the public regarding Corps of Engineers water control management activities.

(10) Fiscal year budget requests for water control management activities

will be prepared and submitted to the Office of the Chief of Engineers in accordance with requirements established in Engineer Circular on Annual Budget Requests for Civil Works Activities. The total annual costs of all activities and facilities that support the water control functions, (excluding physical operation of projects, but including flood control and navigation regulation of projects subject to 33 CFR 208.11) are to be reported. Information on the Water Control Data Systems and associated Communications Category of the Plant Replacement and Improvement Program will be submitted with the annual budget. Reporting will be in accordance with the annual Engineer Circular on Civil Works Operations and Maintenance, General Pro-

(g) Responsibilities: US Army Corps of Engineers projects—(1) Preparation of water control plans and manuals. Normally, district commanders are primarily responsible for background studies and for developing plans and manuals required for reservoirs, locks and dams, reregulation and major control structures and interrelated systems in their respective district areas. Policies and general guidelines are prescribed by OCE engineer regulations while specific requirements to implement OCE guidance are established by the division commanders concerned. Master Water Control Manuals for river basins that include more than one district are usually prepared by or under direct supervision of division representatives. Division commanders are responsible for providing such management and technical assistance as may be required to assure that plans and manuals are prepared on a timely and adequate basis to meet water control requirements in the division area, and for pertinent coordination among districts, divisions, and other appropriate entities.

(2) Public involvement and information—(i) Public meeting and public involvement. The Corps of Engineers will sponsor public involvement activities, as appropriate, to appraise the general public of the water control plan. In developing or modifying water control manuals, the following criteria is applicable.

- (A) Conditions that require public involvement and public meetings include: Development of a new water control manual that includes a water control plan; or revision or update of a water control manual that changes the water control plan.
- (B) Revisions to water control manuals that are administratively or informational in nature and that do not change the water control plan do not require public meetings.
- (C) For those conditions described in paragraph (g)(2)(i)(A) of this section, the Corps will provide information to the public concerning proposed water control management decisions at least 30 days in advance of a public meeting. In so doing, a separate document(s) should be prepared that explains the recommended water control plan or change, and provides technical information explaining the basis for the recommendation. It should include a description of its impacts (both monetary and nonmonetary) for various purposes, and the comparisons with alternative plans or changes and their effects. The plan or manual will be prepared only after the public involvement process associated with its development or change is complete.
- (D) For those conditions described in paragraph (g)(2)(i)(A) of this section, the responsible division office will send each proposed water control manual to the Army Corps of Engineers Head-quarters, Attn: CECW-EH-W for review and comments prior to approval by the responsible division office.
- (ii) Information availability. The water control manual will be made available for examination by the general public upon request at the appropriate office of the Corps of Engineers. Public notice shall be given in the event of occurring or anticipated significant changes in reservoir storage or flow releases. The method of conveying this information shall be commensurate with the urgency of the situation and the lead time available.
- (3) Authority for approval of plans and manuals. Division commanders are delegated authority for approval of water control plans and manuals, and associated activities.

- (4) OCE role in water control activities. OCE will establish policies and guidelines applicable to all field offices and for such actions as are necessary to assure a reasonable degree of consistency in basic policies and practices in all Division areas. Assistance will be provided to field offices during emergencies and upon special request.
- (5) Methods improvement and staff training. Division and district commanders are responsible for conducting appropriate programs for improving technical methods applicable to water control activities in their respective Suitable training programs should be maintained to assure a satisfactory performance capability water control activities. Appropriate coordination of such programs with similar activities in other areas will be accomplished to avoid duplication of effort, and to foster desirable exchange of ideas and developments. Initiative in re-evaluating methods and guidelines previously established in official documents referred to in paragraph (e) of this section is encouraged where needs are evident. However, proposals for major deviations from basic concepts, policies and general practices reflected in official publications will be submitted to CDR USACE (DAEN-CWE) WASH DC 20314 for concurrence or comment before being adopted for substantial application in actual project regulation at field level.
- (h) Directives and technical instruction manuals. (1) Directives issued through OCE Engineer Regulations will be used to foster consistency in policies and basic practices. They will be supplemented as needed by other forms of communication.
- (2) Engineering Manuals (EM) and Engineer Technical Letters (ETL) are issued by OCE to serve as general guidelines and technical aids in developing water control plans and manuals for individual projects or systems.
- (3) EM 1110-2-3600 discusses principles and concepts involved in developing water control plans. Instructions relating to preparation of "Water Control Manuals for speicfic projects" are included. EM 1110-2-3600 should be used as a general guide to water control activities. The instructions are sufficiently flexible to permit adaptation to

- specific regions. Supplemental information regarding technical methods is provided in numerous documents distributed to field offices as "hydrologic references."
- (4) Special assistance in technical studies is available from the Hydrologic Engineering Center, Corps of Engineers, 609 Second Street, Davis, California 95616 and DAEN-CWE-HW.
- (i) Water control manuals for US Army Corps of Engineers projects. (1) As used herein, the term "water control manual" refers to manuals that relate primarily to the functional regulation of an individual project or system of projects. Although such manuals normally include background information concerning physical features of projects, they do not prescribe rules or methods for physical maintenance or care of facilities, which are covered in other documents. (References 15 and 23, Appendix A.)
- (2) Water control manuals prepared in substantially the detail and format specified in instructions referred to in paragraph 8 are required for all reservoirs under the supervision of the Corps of Engineers, regardless of the purpose or size of the project. Water Control manuals are also required for lock and dam, reregulation and major control structure projects that are physically regulated by the Corps of Engineers. Where there are several projects in a drainage basin with interrelated purposes, a "Master Manual" shall be prepared. The effects of non-Corps projects will be considered in appropriate detail, including an indication of provisions for interagency coordination.
- (3) "Preliminary water control manuals," for projects regulated by the Corps of Engineers should contain regulation schedules in sufficient detail to establish the basic plan of initial project regulation.
- (4) As a general rule, preliminary manuals should be superseded by more detailed interim or "final" manuals within approximately one year after the project is placed in operation.
- (5) Each water control manual will contain a section on special regulations to be conducted during emergency situations, including droughts.

Preplanned operations and coordination are essential to effective relief or assistance.

- (6) One copy of all water control manuals and subsequent revisions shall be forwarded to DAEN-CWE-HW for file purposes as soon as practicable after completion, preferably within 30 days from date of approval at the division level.
- (j) Policies and requirements for preparing regulations for non-Corps projects. (1) Division and district commanders will develop water control plans as required by section 7 of the 1944 Flood Control Act, the Federal Power Act and section 9 of Pub. L. 436-83 for all projects located within their areas, in conformance with ER 1110-2-241, 33 CFR part 208. That regulation prescribes the policy and general procedures for regulating reservoir projects capable of regulation for flood control or navigation, except projects owned and operated by the Corps of Engineers; the International Boundary and Water Commission, United States and Mexico; those under the jurisdiction of the International Joint Commission, United States and Canada, and the Columbia River Treaty. ER 1110-2-241, 33 CFR part 208 permits the promulgation of specific regulations for a project in compliance with the authorizing acts, when agreement on acceptable regulations cannot be reached between the Corps Engineers and the owners. Appendix B provides a summary of the Corps of Engineers responsibilities for prescribing regulations for non-Corps reservoir projects.
- (2) Water control plans will be developed and processed as soon as possible for applicable projects already completed and being operated by other entities, including projects built by the Corps of Engineers and turned over to others for operation.
- (3) In so far as practicable, water control plans for non-Corps projects should be developed in cooperation with owning/operating agencies involved during project planning stages. Thus, tentative agreements on contents, including pertinent regulation schedules and diagrams, can be accomplished prior to completion of the project.
- (4) The magnitude and nature of storage allocations for flood control or

non-Corps navigation purposes in projects are governed basically by conditions of project authorizations or other legislative provisions and may include any or all of the following types of storage assignments:

(i) Year-round allocations: Storage

remains the same all year.

(ii) Seasonal allocations: Storage varies on a fixed seasonal basis.

- (iii) Variable allocations of flood control from year to year, depending on hydrologic parameters, such as snow cover.
- (5) Water control plans should be developed to attain maximum flood control or navigation benefits, consistent with other project requirements, from the storage space provided for these purposes. When reservoir storage capacity of the category referred to in paragraph (j)(4)(iii) is utilized for flood control or navigation, jointly with other objectives, the hydrologic parameters and related rules developed under provisions of ER 1110-2-241, 33 CFR part 208 should conform as equitably as possible with the multiple-purpose objectives established in project authorizations and other pertinent legislation.
- (6) Storage allocations made for flood control or navigation purposes in non-Corps projects are not subject to modifications by the Corps of Engineers as a prerequisite for prescribing 33 CFR 208.11 regulations. However, regulations developed for use of such storage should be predicated on a mutual understanding between representatives of the Corps and the operating agency concerning the conditions of the allocations in order to assure reasonable achievement of basic objectives intended. In the event field representatives of the Corps of Engineers, and the operating agency are unable to reach necessary agreements after all reasonable possibilities have been explored, appropriate background explanations and recommendations should be submitted to DAEN-CWE-HW for consideration.
- (7) The Chief of Engineers is responsible for prescribing regulations for use of flood control or navigation storage and/or project operation under the provisions of the referenced legislative acts. Accordingly, any regulations established should designate the division/

district commander who is responsible to the Chief of Engineers as the representative to issue any special instructions required under the regulation. However, to the extent practicable, project regulations should be written to permit operation of the project by the owner without interpretations of the regulations by the designated representative of the Commander during operating periods.

(8) Responsibility for compliance with 33 CFR 208.11 regulations rests with the operating agency. The division or district commander of the area in which the project is located will be kept informed regarding project operations to verify reasonable conformance with the regulations. The Chief of Engineers or his designated representative may authorize or direct deviation from the established water control plan when conditions warrant such deviation. In the event unapproved deviations from the prescribed regulations seem evident, the division or district commander concerned will bring the matter to the attention of the operating agency by appropriate means.

If corrective actions are not taken promptly, the operating agency should be notified of the apparent deviation in writing as a matter of record. Should an impasse arise, in that the project owner or the designated operating entity persists in noncompliance with regulations prescribed by the Corps of Engineers, the Office of Chief Counsel should be advised through normal channels and requested to take necessary measures to assure compliance.

(9) Regulations should contain information regarding the required exchange of basic data between the representative of the operating agency and the U.S. Army Corps of Engineers, that are pertinent to regulation and coordination of interrelated projects in the region.

(10) All 33 CFR 208.11 regulations shall contain provisions authorizing the operating agency to temporarily deviate from the regulations in the event that it is necessary for emergency reasons to protect the safety of the dam, to avoid health hazards, and to alleviate other critical situations.

(k) Developing and processing regulations for non-Corps projects. Guidelines concerning technical studies and development of regulations are contained in ER 1110-2-241, 33 CFR part 208 and EM 1110-2-3600. Appendix C of this regulation summarizes steps normally followed in developing and processing regulations for non-Corps projects.

(l) Water control during project construction stage. Water control plans discussed in preceding paragraphs are intended primarily for application after the dam, spillway and outlet structures; major relocations; land acquisitions, administrative arrangements and other project requirements have reached stages that permit relatively normal project regulation. With respect to non-Corps projects, regulations normally become applicable when water control agreements have been signed by the designated signatories, subject to special provisions in specific cases. In some instances, implementation of regulations has been delayed by legal provisions, contract limitations, or other considerations. These delays can result in loss of potential project benefits and possible hazards. Accordingly, it is essential that appropriate water control and contingency plans be established for use from the date any storage may accumulate behind a partially completed dam until the project is formally accepted for normal operations. Division commanders shall make certain that construction-stage regulation plans are established and maintained in a timely and adequate manner for projects under the supervision of the Corps of Engineers. In addition, the problems referred to should be discussed with authorities who are responsible for non-Corps projects, with the objective of assuring that such projects operate as safely and effectively as possible during the critical construction stage and any period that may elapse before regular operating arrangements have been established. These special regulation plans should include consideration for protection of construction operations; safety of downstream interests that might be jeopardized by failure of partially completed embankments; requirements for minimizing adverse effects on partially completed relocations or incomplete land acquisition; and the need for obtaining benefits from project storage

that can be safely achieved during the construction and early operation period.

- (m) Advisories to OCE regarding water control activities—(1) General. Division commanders will keep the Chief of Engineers currently informed of any unusual problems or activities associated with water control that impact on his responsibilities.
- (2) Annual division water control management report (RCS DAEN-CWE-16(R1)). Division commanders will submit an annual report on water control management activities within their division. The annual report will be submitted to (DAEN-CWE-HW) by 1 February each year and cover significant activities of the previous water year and a description of activities to be accomplished for the current year. Funding information for water control activities will be provided in the letter of transmittal for in-house use only. The primary objective of this summary is to keep the Chief of Engineers informed regarding overall water management activities Corps-wide, thus providing a basis to carry out OCE responsibilities set forth in paragraph (g)(4) of this section.
- (3) Status of water control manuals. A brief discussion shall be prepared annually by each division commander, as a separate section of the annual report on water control management activities discussed in paragraph (m)(2) of this section listing all projects currently in operation in his area, or expected to begin operation within one-year, with a designation of the status of water control manuals. The report should also list projects for which the Corps of Engineers is responsible for prescribing regulations, as defined in ER 1110-2-241, 33 CFR part 208.
- (4) Monthly water control charts (RCS DAEN-CWE-6 (R1)). A monthly record of reservoirs/lakes operated by the Corps of Engineers and other agencies, in accordance with 33 CFR 208.11, will be promptly prepared and maintained by district/division commanders in a form readily available for transmittal to the Chief of Engineers, or others, upon request. Record data may be prepared in either graphical form as shown in EM 1110-2-3600, or tabular

form as shown in the sample tabulation in Appendix  $\boldsymbol{D}$ .

- (5) Annual division water quality reports (RCS DAEN-CWE-15). By Executive Order 12088, the President ordered the head of each Executive Agency to be responsible for ensuring that all necessary actions are taken for prevention, control, and abatement of environmental pollution with respect to Federal facilities and activities under control of the agency. General guidance is provided in references 24 and 25, Appendix A, for carrying out this agency's responsibility. Annual division water quality reports are required by reference 24, Appendix A. The report is submitted in two parts. The first part addresses the division Water quality management plan while the second part presents specific project information. A major objective of this report is to summarize information pertinent to water quality aspects of overall water management responsibilities. The annual division water quality report may be submitted along with the annual report on water control management activities discussed in paragraph 13b above.
- (6) Master plans for water control data systems (RCS DAEN-CWE-21). (i) A water control data system is all of the equipment within a division which is used to acquire, process, display and distribute information for real-time project regulation and associated interagency coordination. A subsystem is all equipment as defined previously within a district. A network is all equipment as defined previously which is used to regulate a single project or a group of projects which must be regulated interdependently.
- (ii) Master plans for water control data systems and significant revisions thereto will be prepared by division water control managers and submitted to DAEN-CWE-HW by 1 February each year for review and approval of engineering aspects. Engineering approval does not constitute funding approval. After engineering approval is obtained, equipment in the master plan is eligible for consideration in the funding processes described in ER 1125-2-301

and engineering circulars on the annual budget request for civil works activities. Master plans will be maintained current and will:

- (A) Outline the system performance requirements, including those resulting from any expected expansions of Corps missions.
- (B) Describe the extent to which existing facilities fulfill performance requirements.
- (C) Describe alternative approaches which will upgrade the system to meet the requirements not fulfilled by existing facilities, or are more cost effective then the existing system.
- (D) Justify and recommend a system considering timeliness, reliability, economics and other factors deemed important.
- (E) Delineate system scope, implementation schedules, proposed annual capital expenditures by district, total costs, and sources of funding.
- (iii) Modified master plans should be submitted to DAEN-CWE-HW by 1 February, whenever revisions are required, to include equipment not previously approved or changes in scope or approach. Submittal by the February date will allow adequate time for OCE review and approval prior to annual budget submittals.
- (iv) Division commanders are delegated authority to approve detailed plans for subsystems and networks of approved master plans. Plans approved by the division commander should meet the following conditions:
- (A) The plan conforms to an approved master plan.
- (B) The equipment is capable of functioning independently.
- (C) An evaluation of alternatives has been completed considering reliability, cost and other important factors.
- (D) The plan is economically justified, except in special cases where legal requirements dictate performance standards which cannot be economically justified.
- (v) Copies of plans approved by the division commander shall be forwarded to appropriate elements in OCE in support of funding requests and to obtain approval of Automatic Data Processing Equipment (ADPE), when applicable.

(vi) Water control data systems may be funded from Plant Revolving Fund; O&M General; Flood Control, MR&T, and Construction, General. Funding for water control equipment that serves two or more projects will be from Plant Revolving Fund in accordance with ER 1125-2-301. District and division water control managers will coordinate plant revolving fund requests with their respective Plant Replacement and Improvement Program (PRIP) representatives following guidance provided in ER 1125-2-301. Budget funding requests under the proper appropriation title should be submitted only if the equipment is identified in an approved master plan.

(vii) Justification for the Automatic Data Processing Equipment (ADPE) aspects of water control data systems must conform to AR 18–1, Appendix I or J as required. The "Funding for ADPE" paragraph in Appendixes I and J must cite the source of funds and reference relevant information in the approved master plan and detailed plan.

(viii) Division water control managers will submit annual letter summaries of the status of their respective water control systems and five-year plan for improvements. These summaries will be submitted to DAEN-CWE by 1 June for coordination with DAEN-CWO, CWB and DSZ-A, prior to the annual budget request. Summaries should not be used to obtain approval of significant changes in master plans. Sources of funding for all items for each district and for the division should be delineated so that total system expenditures and funding requests are identified. Changes in the master plan submitted 1 February should be documented in this letter summary if the changes were approved.

(7) Summary of runoff potentials in current season (RCS DAEN-CWO-2). (i) The Chief of Engineers and staff require information to respond to inquiries from members of Congress and others regarding runoff potentials. Therefore, the division commander will submit a snowmelt runoff and flood potential letter report covering the snow accumulation and runoff period, beginning generally in February and continuing monthly, until the potential no longer exist. Dispatch of supplemental reports will be determined by the urgencies of situations as they occur. The reports will be forwarded as soon as hydrologic data are available, but not later than the 10th of the month. For further information on reporting refer to ER 500–1–1, 33 CFR part 203.

(ii) During major drought situations or low-flow conditions, narrative summaries of the situation should be furnished to alert the Chief of Engineers regarding the possibility of serious runoff deficiencies that are likely to call for actions associated with Corps of Engineers reservoirs.

(iii) The reports referred to in paragraphs (m)(7) (i) and (ii) of this section will include general summaries regarding the status of reservoir storage, existing and forecasted at the time of the reports.

- (8) Reports on project operations during flood emergencies. Information project regulations to be included in reports submitted to the Chief of Engineers during flood emergencies in accordance with ER 500-1-1 include rate of inflow and outflow in CFS, reservoir levels, predicted maximum level and anticipated date, and percent of flood control storage utilized to date. Maximum use should be made of computerized communication facilities in reporting project status to DAEN-CWO-E/CWE-HW in accordance with the requirements of ER 500-1-1, 33 CFR part 203.
- (9) Post-flood summaries of project regulation. Project regulation effects including evaluation of the stage reductions at key stations and estimates of damages prevented by projects will be included in the post flood reports required by ER 500-1-1, 33 CFR part 203.
- (n) Water Control Management Boards. (1) The Columbia River Treaty Permanent Engineering Board was formed in accordance with the Columbia River Treaty with Canada. This board, composed of U.S. and Canadian members, oversees the implementation of the Treaty as carried out by the U.S. and Canadian Entities.
- (2) The Mississippi River Water Control Management Board was established by ER 15-2-13. It consists of the Division Commanders from LMVD, MRD, NCD, ORD, and SWD with the Director of Civil Works serving as chairman. The purposes of the Board are:

(i) To provide oversight and guidance during the development of basin-wide management plans for Mississippi River Basin projects for which the US Army Corps of Engineers has operation/regulation responsibilities.

(ii) To serve as a forum for resolution of water control problems among US Army Corps of Engineers Divisions within the Mississippi River Basin when agreement is otherwise unobtainable.

(o) List of projects. Projects owned and operated by the Corps of Engineers subject to this regulation are listed with pertinent data in Appendix E. This list will be updated periodically to include Corps projects completed in the future. Federal legislation, Federal regulations and local agreements have given the Corps of Engineers wide responsibilities for operating projects which it does not own. Non-Corps projects subject to this regulation are included in Appendix A of ER 1110-2-241.

### APPENDIX A TO §222.5—REFERENCES

- The Federal Power Act, Pub. L. 436-83, approved 10 June 1920, as amended (41 Stat. 1063; 16 U.S.C. 791(a))
- Section 3 of the Flood Control Act approved 22 June 1936, as amended (49 Stat. 1571; 33 U.S.C. 701(c))
- 3. Section 9(b) of Reclamation Project Act of 1939, approved 4 August 1939 (53 Stat. 1187; 43 U.S..C. 485)
- 4. Section 7 of the Flood Control Act approved 22 December 1944 (58 Stat. 890; 33 U.S.C. 709)
- 5. Section 5 of Small Reclamation Projects Act of 6 August 1956, as amended (70 Stat. 1046; 43 U.S.C. 422(e))
- Section 9 of Pub. L. 436–83d Congress (68 Stat. 303)
- 7. The Fish and Wildlife Coordination Act of 1958, Pub. L. 85-624
- 8. The Federal Water Project Recreation Act Uniform Policies, Pub. L. 89-72
- 9. The National Environmental Policy Act of 1969, Pub. L. 91–190
- 10. The Clean Water Act of 1977, Pub. L. 95-217
- 11. Executive Order 12088, Federal Compliance with Pollution Control Standards, 13 October 1978
- 33 CFR 208.10, Local flood protection works; maintenance and operation of structures and facilities (9 FR 9999; 9 FR 10203)
- 13. 33 CFR 208.11, Regulations for use of Storage Allocated for Flood Control or Navigation and/or Project Operation at Reservoirs

subject to Prescription of Rules and Regulations by the Secretary of the Army in the Interest of Flood Control and Navigation (43 FR 47184)

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14. AR 18-1
15. ER 11-2-101
16. ER 15-2-13
17. ER 500-1-1, 33 CFR part 203
18. ER 1110-2-241, 33 CFR part 208
19. ER 1110-2-1400
20. ER 1110-2-1402
21. ER 1110-2-1941
22. ER 1110-2-301
23. ER 1130-2-303
24. ER 1130-2-334
25. ER 1130-2-415
26. ER 1130-2-417
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27. ER 1130-2-419

28. EM 1110-2-3600

APPENDIX B TO §222.5—SUMMARY OF CORPS OF ENGINEERS RESPONSIBILITIES FOR PRESCRIBING REGULATIONS FOR NON-CORPS RESERVOIR PROJECTS

#### Summary

1. (a) "Regulations for Use of Storage Allocated for Flood Control or Navigation and/or Project Operation at Reservoirs subject to Prescription of Rules and Regulations by the Secretary of the Army in the Interest of Flood Control and Navigation' (33 CFR 208.11) prescribe the responsibilities and general procedures for regulating reservoir projects capable of regulation for flood control or navigation and the use of storage allocated for such purposes and provided on the basis of flood control and navigation, except projects owned and operated by the Corps of Engineers; the International Boundary and Water Commission, United States and Mexico; and those under the jurisdiction of the International Joint Commission, United States and Canada, and the Columbia River Treaty.

(b) Pertinent information on projects for which regulations are prescribed under Section 7 of the 1944 Flood Control Act, (Pub. L. 78–58 Stat. 890 (33 U.S.C. 709)) the Federal Power Act (41 Stat. 1063 (16 U.S.C. 791(A))) and Section 9 of Pub. L. 436–83d Congress (68 Stat. 303) is published in the FEDERAL REGISTER in accordance with 33 CFR 208.11.

Publication in the FEDERAL REGISTER establishes the fact and the date of a project's regulation plan promulgation.

2. Section 7 of Act of Congress approved 22 December 1944 (58 Stat. 890; 33 U.S.C. 709), reads as follows:

"Hereafter, it shall be the duty of the Secretary of War to prescribe regulations for the use of storage allocated for flood control or navigation at all reservoirs constructed wholly or in part with Federal funds provided on the basis of such purposes, and the

operation of any such project shall be in accordance with such regulations: *Provided*, That this section shall not apply to the Tennessee Valley Authority, except that in case of danger from floods on the Lower Ohio and Mississippi Rivers the Tennessee Valley Authority is directed to regulate the release of water from the Tennessee River into the Ohio River in accordance with such instructions as may be issued by the War Department."

3. Section 9(b) of the Reclamation Project Act of 1939, approved 4 August 1939 (53 Stat. 1189, 43 U.S.C. 485), provides that the Secretary of the Interior may allocate to flood control or navigation as part of the cost of new projects or supplemental works; and that in connection therewith he shall consult with the Chief of Engineers and may perform any necessary investigations under a cooperative agreement with the Secretary of the Army. These projects are subject to 33 CFR 208.11 regulations.

4. Several dams have been constructed by State agencies under provisions of legislative acts wherein the Secretary of the Army is directed to prescribe rules and regulations for project operation in the interest of flood control and navigation. These projects are subject to 33 CFR 208.11 regulations.

5. There are few dams constructed under Emergency Conservation work authority or similar programs, where the Corps of Engineers has performed major repairs or rehabilitation, that are operated and maintained by local agencies which are subject to 33 CFR 208.11 regulations.

6. The Federal Power Act, approved 10 June 1920, as amended (41 Stat. 1063, 16 U.S.C. 791 (A)), established the Federal Power Commission, now Federal Energy Regulatory Commission (FERC), with authority to issue licenses for constructing, operating, and maintaining dams or other project works for the development of navigation, for utilization of water power and for other beneficial public uses in any streams over which Congress has jurisdiction. The Chief of Engineers is called upon for advice and assistance as needed in formulating reservoir regulation requirements somewhat as follows:

a. In response to requests from the FERC, opinions and technical appraisals are furnished by the Corps of Engineers for consideration prior to issuance of licenses by the FERC. Such assistance may be limited to general presentations, or may include relatively detailed proposals for water control plans, depending upon the nature and scope of projects under consideration. The information furnished is subject to such consideration and use as the Chairman, FERC, deems appropriate. This may result in inclusion of simple provisions in licenses without elaboration, or relatively detailed requirements for reservoir regulation schedules and plans.

- b. Some special acts of Congress provide for construction of dams and reservoirs by non-Federal agencies or private firms under licenses issued by the FERC, subject to stipulation that the operation and maintenance of the dams shall be subject to reasonable rules and regulations of the Secretary of the Army in the interest of flood control and navigation. Ordinarily no Federal funds are involved, thus Section 7 of the 1944 Flood Control Act does not apply. However, if issuance of regulations by the Secretary of the Army is required by the authority under which flood control or navigation provisions are included as functions of the specific project or otherwise specified in the FERC license, regulation plans will be prescribed in accordance with 33 CFR 208.11 regulations.
- 7. Projects constructed by the Corps of Engineers for local flood protection purposes are subject to conditions of local cooperation as provided in Section 3 of the Flood Control Act approved 22 June 1936, as amended. One of those conditions is that a responsible local agency will maintain and operate all works after completion in accordance with regulations prescribed by the Secretary of the Army. Most such projects consist mainly of levees and flood walls with appurtenant drainage structures. Regulations for operation and maintenance of these projects has been prescribed by the Secretary of the Army in 33 CFR 208.10. When a reservoir is included in such a project, it may be appropriate to apply 33 CFR 208.10 in establishing regulations for operation, without requiring their publication in the FEDERAL REGISTER. For example, if the reservoir controls a small drainage area, has an uncontrolled flood control outlet with automatic operation or contains less than 12,500 acre-feet of flood control or navigation storage, 33 CFR 208.10 may be suitable. However, 33 CFR 208.11 regulations normally would be applicable in prescribing flood control regulations for the individual reservoir, if the project has a gated flood control outlet by which the local agency can regulate floods.
- 8. Regulation plans for projects owned by the Corps of Engineers are not prescribed in accordance with 33 CFR 208.11. However, regulation plans for projects constructed by the Corps of Engineers and turned over to other agencies or local interests for operation may be prescribed in accordance with 33 CFR 208.11.
- 9. The Small Reclamation Projects Act of 6 August 1956 provides that the Secretary of the Interior may make loans or grants to local agencies for the construction of reclamation projects. Section 5 of the Act provides in part that the contract covering any such grant shall set forth that operation be in accordance with regulations prescribed by the head of the Federal department or agency primarily concerned. Normally, 33 CFR 208.11 is not applicable to these projects.

- APPENDIX C TO §222.5—PROCEDURES FOR DEVELOPING AND PROCESSING REGU-LATIONS FOR NON-CORPS PROJECTS IN CONFORMANCE WITH 33 CFR 208.11
- 1. Sequence of actions. a. Discussions leading to a clarification of conditions governing allocations of storage capacity to flood control or navigation purposes and project regulation are initiated by District/Division Engineers through contacts with owners and/or operating agencies concerned at regional level.
- b. Background information on the project and conditions requiring flood control or navigation services, and other relevant factors, are assembled by the District Engineer and incorporated in a "Preliminary Information Report". The Preliminary Information Report will be submitted to the Division Engineer for review and approval. Normally, the agency having jurisdiction over the particular project is expected to furnish information on project features, the basis for storage allocations and any other available data pertinent to the studies. The Corps of Engineers supplements this information as required.
- c. Studies required to develop reservoir regulation schedules and plans usually will be conducted by Corps of Engineers personnel at District level, except where the project regulation affects flows in more than one district, in which case the studies will be conducted by or under supervision of Division personnel. Assistance as may be available from the project operating agency or others concerned will be solicited.
- d. When necessary agreements are reached at district level, and regulations developed in accordance with 33 CFR 208.11 and EM 1110-2-3600, they will be submitted to the Division Commander for review and approval, with information copies for DAEN-CWE-HW. Usually the regulations include diagrams of operating parameters.
- e. For projects owned by the Bureau of Reclamation, the respective Regional Directors are designated as duly authorized representatives of the Commissioner of Reclamation. By letter of 20 October 1976, the Commissioner delegated responsibilities to the Regional Directors as follows: "Regarding the designated authorization of representatives of the Commissioner of Reclamation in matters relating to the development and processing of Section 7 flood control regulations, we are designating each Regional Director as our duly authorized representative to sign all letters of understanding, water control agreements, water control diagrams, water control release schedules and other documents which may become part of the prescribed regulations. The Regional Director also will be responsible for obtaining the signature of the designated operating

agency on these documents where such is required. Regarding internal coordination within the Bureau of Reclamation, the Regional Directors will obtain the review and approval of this office and at appropriate offices with our Engineering and Research Center, Denver, Colorado, prior to signing water control documents."

f. In accordance with the delegation cited in paragraph e, 33 CFR 208.11 regulations pertaining to Bureau of Reclamation projects will be processed as follows:

- (1) After regulation documents submitted by District Commanders are reviewed and approved by the Division Commander they are transmitted to the respective Regional Director of the Bureau of Reclamation for concurrence of comment, with a request that tracings of regulation diagrams be signed and returned to the Division Commander.
- (2) If any questions arise at this stage appropriate actions are taken to resolve differences. Otherwise, the duplicate tracings of the regulation diagram are signed by the Division Commander and transmitted to the office of the project owner for filing.
- (3) After full agreement has been reached in steps (1) and (2), the text of proposed regulations is prepared in final form. Copies of any diagrams involved are included for information only.
- (4) A letter announcing completion of action on processing the regulations, with pertinent project data as specified in paragraph 208.11(d)(11) of 33 CFR 208.11, and one copy of the signed tracings of diagrams are forwarded to HQDA (DAEN-CWE-HW) WASH DC 20314 for promulgation and filing. The office of the Chief of Engineers will forward

the pertinent project data to the Liaison Officer with the Federal Register, requesting publication in the FEDERAL REGISTER.

- g. Regulations developed in accordance with 33 CFR 208.11 and applicable to projects that are not under supervision of the Bureau of Reclamation are processed in substantially the manner described above. All coordination required between the Corps of Engineers and the operating agency will be accomplished at field level.
- h. Upon completion of actions listed above, Division Commanders are responsible for informing the operating agencies at field level that regulations have been promulgated.
- 2. Signature blocks: Some 33 CFR 208.11 regulations contain diagrams of parameter curves that cannot be published in the FEDERAL REGISTER, but are made a part thereof by appropriate reference. Each diagram bears a title block with spaces for the signature of authenticating officials of the Corps of Engineers and the owner/operating agency of the project involved.
- 3. Designation of Corps of Engineers Representatives. Division Commanders are designated representatives of the Chief of Engineers in matters relating to development and processing of 33 CFR 208.11 regulations for eventual promulgation through publication of selected data specified in paragraph (d)(11) §208.11. Division Commanders are designated as the Corps of Engineers signee on all letters of understanding, water control agreements and other documents which may become part of prescribed regulations for projects located in their respective geographic areas, and which are subject to the provisions of 33 CFR 208.11.

### APPENDIX D TO §222.5—SAMPLE TABULATION

### BARDWELL LAKE, MONTHLY LAKE REPORT, MAY 1975

Day	Elevation 2,400 fe		Storage 2400 A-F	Evap DSF	Pump DSF	Release DSF	Inflow adj. DSF	Rain, inch
1	421.30	421.31	55979	28	2.0	0	84	0.00
2	421.32	421.37	56196	5	2.0	0	117	.00
3	421.43	421.44	56449	23	1.9	0	152	.14
4	421.45	421.47	56558	1	1.8	0	58	.00
5	421.49	421.34	56088	1	2.0	324	50	.00
6	421.20	421.01	54902	14	1.9	632	50	.00
7	420.88	420.89	54473	4	2.0	269	59	.09
8	420.89	420.91	54544	5	2.3	0	44	.00
9	420.90	420.89	54473	11	1.5	0	38	.00
10	420.90	420.90	54509	28	3.0	0	27	.00
11	420.91	421.35	56124	26	1.8	0	824	.00
12	421.54	421.65	57213	31	2.1	0	582	1.61
13	421.70	421.75	57578	29	2.2	0	216	.00
14	421.78	421.76	57614	34	1.9	249	303	.03
15	421.69	421.52	56739	22	1.9	643	225	.57
16	421.39	421.28	55871	39	2.1	535	138	.00
17	421.19	421.09	55188	10	2.2	393	119	.00
18	421.03	421.05	55045	46	2.0	143	60	.00
19	421.04	421.07	55116	17	2.3	0	55	.00
20	421.06	421.30	55943	21	2.1	0	440	.21

## Corps of Engineers, Dept. of the Army, DoD

§ 222.5

### BARDWELL LAKE, MONTHLY LAKE REPORT, MAY 1975—Continued

Day	Elevation 2,400 fe		Storage 2400 A-F	Evap DSF	Pump DSF	Release DSF	Inflow adj. DSF	Rain, inch
21	421.39	421.47	56558	20	2.1	0	332	.97
22	421.50	421.39	56268	42	2.1	247	145	.00
23	421.37	424.91	69726	31	2.0	328	7146	.22
24	425.61	426.15	74825	22	2.0	0	2595	2.38
25	426.15	426.55	76523	18	2.3	0	876	.11
26	426.72	426.80	77598	42	2.1	0	586	.00
27	426.95	427.00	78465	23	2.0	0	462	.00
28	427.14	427.15	79116	31	2.1	0	361	.19
29	427.31	427.70	81528	61	1.9	0	1279	.20
30	427.94	428.05	83082	11	2.0	0	796	1.02
31	428.20	428.22	83837	7	2.1	0	389	.00
Monthly total:								
(DSF)				700	64	3763	18626	7.74
(A–F)			27966	1389	126	7464	36945	

APPENDIX E TO § 222.5—LIST OF PROJECTS

		APPENDIX E TO § 222.5—LIST OF PROJECTS	MIST OF P	ROJECTS					
Project name 1	State/county	Stream 1	Project pur-	Storage 1,000	Elev limits feet M.S.L.	its feet .L.	Area in acres	acres	Auth legis <sup>3</sup>
			asod		Upper	Lower	Upper	Lower	,
		Lower Mississippi Valley Division	Valley Divisio	<b>c</b>					
Alligator—Catfish FG	MS Issaquena	Little Sunflower	<u> </u>	0.0	0.0	0.0	0	0	FCA Jun 36.
Arkabutta LK	MS Desoto	Coldwater	<u>.</u> L	525.0	238.3	209.3	33,400	5,100	FCA Jun 36.   ECA Jun 36.
Biographic EG	INS landiatelle	Ascall Dispussion	L U	0.0	20.0	0.0	0 0	0 0	
Big Lk Ditch #81 CS		Ditch 81 Extension.	ں۔	0.0	0.0	230.0	0	00	
Big Lk Div CS		Little R	O	0.0	0.0	230.0	0	0	
Big Lk North End CS		Little R	0	0.0	0.0	230.0	0	0	FCA Oct 65.
Big Lk South end CS	AR Mississippi	Ditch 28	UL	0.0	330.5	328.5	131.000	71.000	
Floodway.		-							
Bodcau Lk	LA Bossier	Bayou Bodcau	L	35.3	199.5	157.0	21,000	110	
Bonnet Carre Div Spillway	LA St Charles	Mississippi R	ш.	0.0	24.0	20.0	0 (	0	
Bowman Lock	LA Vermilion	GIWW	_ 2	0.0	1.2	1.2	0 0	0 00	PL /9-14.   FO 1 Oct 65
Caddo LK	LA Caddo	Cypress Bayou	2 4	0.82	182.7	200.0	29,000	76,800	
Calcasieu SW Barrier & Lock	IL Pulaski	Calcasien R	L _	0.0	1.0	233.0	0 0	0 0	PL 30-463.   RHA Oct 62
כמוכמסוכם כעי במוויפו א בסכא		Oaloa 17	-	9	<u>i</u>	<u>.</u>	•	•	N. M. C. C. C. C.   PL 79—525.
Calion L&D	AR Union	Ouachita	z	0.0	77.0	77.0	12,200	12,200	
Calument FG East & West	LA St Mary	Wax Lake Outlet Bayou	Z	0.0	3.0	3.0	0	0	FCA Jun 36.
	SICO ON	Soft D	\ C	O L	000	0 10	000	780	
Carlol Kereg	I Clinton	Kaskaskia R	Ž L L	0.0	462.5	445.0	50 440	24 580	SD 44
	)		NMCAR	233.0	445.0	429.5	0	7,100	
Catahoula Lk CS	LA LaSalle	Catahoula Div	CR	118.0	34.0	27.0	25,000	98	
Catfish Point CS	LA Cameron	Mermentau R	Z	0.0	1.2	1.2	0 0	0 0	FCA Aug 41, RHA Jul 64.
Charenton FG	LA St Mary	Grand LK	Z	0.0	0.0	0.0	>	0	
Cocodrie EG EG	I A Concorida	Bayou Cocodrie	ц	C	46.0	13.0	C	C	_
Collins Cr	MS Warren	Collins Cr	. ш	0.0	84.0	67.0	0	0	FCA 1941.
Columbia L&D	_	Ouachita	z	0.0	52.0	52.0	7.070	7.070	
Connerly CS	_	Connerly Bayon	FCR	0.0	116.0	106.0	0	0	
	LA St Landry	Bayou Courtableau	ш	0.0	18.0	16.0	0	0	FCA May 28, PL 391-70.
Darbonne CS	LA St. Landry	Bayou Darbonne	ᇤ	0.0	18.0	16.0	0	0	
DeGray LK	AR Desoto	Caddo	FNPMRA	881.9	423.0	342.0	23,800	6,400	
DeGray Rereg. St	AR Clark	Caddo	NMRA	3.6	221.0	209.0	430	90	
Ditch Bayou Dam	AR Chicot	Ditch Bayou	FCR	0.0	106.0	93.0	0	0	
Drainage Dist #17 PS	AR Mississippi	Ditch 71	ш	3.0	236.0	228.0	4,100	0	FCA Aug 68, PL
Drinkwater PS	MO Mississippi	Drinkwater Sewer	ш	20.6	315.0	307.0	4,000	200	
Dupre FG	LA St Bernard	Bayou Dupre	LІ	0.0	2.0	2.0	0 0	0 0	
East St Louis PS	IL St. Clair	IDD Missississis	ı.	0.0	0.0	0.0	5 0	<b>&gt;</b> C	FC Act 36.
Empire FG Hurr Prot & Lock	LA Plaque mines	Mississippi K	_	0.0	5.0	5.0	5	>	PL 8/4–8/.

Enid Lk Felsentl	Enid LK Felsenthal L&D Finlay Street PS	MS YalobushaAR Union	Yacona	ши	32.5	268.0	230.0	28,000 46,500	6,100	FCA Jun 36. RHA 1950. FCA 1948 PI 85_500
Freshw	Freshwater Lock	LA Vermilion	Freshwater Bayou	₹	0:0	0.0		, 0	10	PL 86–645.
Graham Grenada	Graham Burke PSGrenada Lk	AR Phillips	White Yalobusha Skuna	шш	2,805.0	174.8	140.0	149,000	2,500	FCA May 28, PL 85–500. FCA Jun 36.
Huxtabl	Huxtable PS	AR Lee	St Francis	ш:	2,863.0	207.2		18,500	1,400	FCA May 50.
Jonesvi. Kackaci	Jonesville L&D	LA Catanoula	Kackackia R	Z Z	0.0	368.0	363.0	30,7	1 200	KHA 1950. SD 44
L&D 1	3	LA Catahula	Red R	z	0.0	40.0	40.0	0	0	PL 90-483.
L&D 2		LA Rapides	Red R	z	0.0	71.2	64.0	0	0	PL 90-483.
L&D 3	L&D 3	LA Rapides	Red R	z	0.0	95.0	91.5	0	0	PL 90-483.
L&D 4		LA Natchitoches	Red R	z	0.0	120.0	119.6	0	0	PL 90-483.
L&D 5	L&D 5	LA Red R	Red R	z	0.0	145.0	140.2	0	0	PL 90-483.
L&D 24	-&D 24	MO Pike	Mississippi R	z	29.7	449.0	445.0	13,000	12,000	R&H Act, Jul 3/30.
30 0 0	, C	Z COS		Z	707	0 7 6 7	7007	100	16 600	R&H Act, Aug 30/35.
רמה לא					7.	2	1.634	9,5	9,5	R&H Act 8/30/35
L&D 26	L&D 26	IL Madison	Mississippi R	z	107.1	419.0	414.0	30,000	27,700	R&H Act, Jul 3/30.
Larose	Larose to Golden Meadow Hurr Prot	LA LaFourche	Bayou LaFourche	L	0.0	3.0	3.0	0	0	FCA Oct 65, PL 89-298.
Щ Р.	FG.	MS Issaellana	it Stuffower	ш	0	0.50	009	C	c	ECA 1941
	1 + 10 College to Coll	XX = 11455	Missississis	. 4	9 4	0.000	0.00	0 0	0 0	FO A Oct 6F
- FX # 25 C	LK Chicat DS	AR Chicat	Macon I k	L II	0.0	118.2	0.202	0 0	0 0	FCA Oct 63.
	K Graeson	AR Pike	little Missouri	<u> </u>	0.0	563.0	436.9	0 0	0 0	FCA 1941
Z Z				. 6	407.9	563.0	504.0	9.800	2.500	
Lk Oua	chita	AR Garland	Ouachita		0.0	592.0	480.0	0		FCA Dec 44.
Long Br	Long Branch DS	LA Catahoula	Catahoula Div	ш.	0.0	32.5	32.5	0	0	FCA May 50.
Mark Tv	Mark Twain Lk	MO Ralls	Salt R	L	894.0	638.0	0.909	38,400		HD 507.
				PMCAR	457.0	0.909	567.2	18,600	2,900	
Marked	Marked Tree Siphon	AR Poinsett	St. Francis	L	0.0	229.0	198.3	0	0	FCA Jun 30.
Morgan:	Morganza Div CS	LA Point Coupee	Morganza Floodway	L	0.0	265	49.0	0		FCA May 28.
Muddy	Muddy Bayou CS	MS Warren	Muddy Bayou	5	30.0	6.97	70.0	4,350	2,860	FCA Oct 65.
Old Riv	Old River Div CS Low Sill Overbank &	LA W. Feliciana	Old R	ட	0.0	20.0	2.0	0	0	PL 83-780.
Aux.				-				•	•	
Old Riv	Old River Lock	LA W Feliciana	Od R	zi	0.0	65.4	10.0	0 (	0 (	FCA Sep 54, PL 780-83.
Port All	Port Allen Lock	LA Port Allen	GIWW	ZI	0.0	46.1	5.6	0	0	KHA Jul 46.
Prairie I		IL St Clair	IDD	ш. і	0.0	0.0	0.0	0 0	0 0	FC Act 62.
Kapides	Rapides-Boeut Div Canal CS	LA Kapides	Bayou Kapides		0.0	0.99	62.7	0	0	FCA Aug 41, GD 359-77.
Rend L	Rend Lk	L Franklin	Big Muddy R	ш. У.	109.0	405.0	410.0	24,800	18,900	HD 541.
Sardis	Sardis I k	MS Panola	l ittle Sunflower	Ę LL	1,569.9	281.4	236.0	58.500	10,700	FCA Jun 36
Schoon	Schooner Bayon CS & Lock	LA Vermilion	Schooner Bayou	_	0.0	12	1.2	C		FCA Aug 41
Shelbyv	Shelbyville Lk	IL Shelby	Kaskaskia R	ш	474.0	626.5	2669	25,300	11,100	HD 232.
•				NMCAR	180.0	2669	573.0	11,100	3,000	
Sorrell I	Sorrell Lock	LA Iberville	GIWW	z	0.0	29.7	3.5	0	0	FCA May 28.
St Fran	St Francis Lk CS	AR Poinsett	Oak Donnick Floodway		0.0	0.0	210.0	0	2,240	FCA Oct 65.
Steele E	Steele Bayou CS	MS Issaquena	Steele Bayou	_	0.0	68.5	0.09	0	0	FCA 1941.

APPENDIX E TO § 222.5—LIST OF PROJECTS—Continued

	Autn legis 3	FCA Jun 36. FCA Jun 36. PL 89–789, FCA May 28.	FCA Jul 46.	i, PL 75–761.																			PI 78-534							
	Autn	FCA Jun 36. FCA Jun 36. PL 89–789, ECA Oct 65.			FCA Jun 36	FCA 1948.	FCA Jun 36		PL 90-483.	SD 87-90.	PL /8-534.	SD 247-78.				PL 87-874. HD 574-87.	_	HD 396–84.	PL 78-534.	PL 80-858.		HD 669–80.	PL //=226. HD 426-76		SD 122-87.	PL 77–228.	PL 85–500		PL 77-228.	
acres	Lower	0000	180	2,300	0,200	4 0	00		109	17	900,090	57,000	77/	315	- 6	1,732	1,780	0	0	2	1,412	12	700	2,006	0	36	230	_	4 E	3
Area in acres	Upper	0000	7,800	9,300	23,200	o c	00		718	109	61,000	60,000	722	099	315	5,131	3,640	1,780	283	7	4,742	1,412	2,657	12,891	2,006	198	98	230	214	Ī
its feet	Lower	84.0 92.0 16.0	235.0	142.0	354.7	296.0	0.69		5,558.0	5,528.0	1,422.0	1,420.0	760.0	1,307.4	1,277.0	2,754.8	1,284.0	1,250.0	2,540.0	3,526.0	5,432.0	5,385.0	5,500.0	875.5	820.0	3,585.0	3,548.0	1,197.0	3,875.0	3,000.0
Elev limits feet	Upper	110.0	252.0	158.0	111.6	302.0	0.96		5,635.5	5,558.0	1,423.0	1,422.0	802.0	1,322.5	1,307.4	2,777.0	1,311.0	1,284.0	2,593.0	3,545.0	5,500.0	5,432.0	2,280.0	903.4	875.5	3,651.4	3,585.0	1,232.9	3,936.0	0,010,0
Storage	AF.	0.0	23.4	96.1	0.0	0.0	0.0		28.8	6. 6	61.0	117.0	10.8	7.2	3.0	15.5	71.6	26.0	6.5	0.1	204.7	26.7	14.0	267.8	129.2	6.7	0.0	2.6	7.7	4.0
Project pur-	pose 2	цц∑ц	- Щ	LL L	_ L	LL U	L ILL	er Division	ш	- FCR	L	FNPIMCAR	FRC	L	- FCR	FMCR	ш	FCR	ш	ш	ш	Ğ.	L III	Ĺ.	FMCAR	ıı (	Ϋ́L	FCR	L 0	
i	offeam	Tchula Lk	Little R	Cypress Bayou	Wasp Lk-Bear Cr	Mississippi	Yazoo	Missouri River Division	Bear Cr		Missouri K	0 0 10	Little Dide N	Olive Br. Salt Creek	i i	No FK Grand River	Oak Creek trib. Salt	Creek.	Bull Hook Cr Scott Cou-	Deadman's Gulch	S Platte		Clearly C	Wakarusa R		Cold Brook	Holmes Cr Trib to Salt Cr		SD Fall River Cottonwood Springs Cr	_
	State/county	MS Humphreys	MO Dunklin	LA Caddo	MS Humphreys	KY Fulton	MS Yazoo		CO Jefferson		SD Lyman Butfalo Hughes.	o CM		NE Lancaster	(	ND Bowman	NE Lancaster		MT Hill	SD Pennington	CO Douglas	, C	CO Alapitation	KS Douglas		SD Fall River	NF Lancaster			_
	Project name	Tchula Lk Lower FG	Treasure Island PS	Wallace Lk	Waspalello LK	West Hickman PS	Yazoo City PS		Bear Creek Dam & Res		Big Bend Dam & Lk Sharpe	0 000	Dide Opinigs Dain & En	Blue Stem Lake & Dam 4		Bowman-Haley Dam & Res	Branched Oak Lk & Dam 18		Bull Hook Dam	Cedar Canyon Dam	Chatfield Dam & Res		Cherry Or Daill & Nes	Clinton Dam & Lk		Cold Brook Dam & Res	Conestoga Lake & Dam 12		Cottonwood Springs Dam & Res	

Fort Peck Dam & Res	MT Valley, Mc Cone	Missouri R	ш	977.0	2,250.0	2,246.0	249,000	240,000	PL 73-409.	
			FNPIMCAR	13,649.0	2,246.0	2,160.0	240,000	92,000	PL 75–529, HD 238–73 PI 78–534 SD 247–78	ري ون ور
Fort Randall Dam, Lk Francis Case	SD Gregory Charles	Missouri R	ш	985.0	1,375.0	1,365.0	102,000	95,000		j
			FNPIMCAR	3,021.0	1,365.0	1,320.0	95,000	41,000	SD 247-78.	
Garrison Dam, LK Sakakawea	ND Mercer McLean	Missouri K	FNPIMCAR	1,494.0	1,854.0	1,850.0	382,000	365,000	PL /8-534. SD 247-78	
Gavins Point Dam, Lewis & Clark Lk	SD Yankton	Missouri R		61.0	1.210.0	1,208.0	32,000	29,000	PL 78–534.	
	NE Knox		FNPIMCAR	95.0	1,208.0	1,204.5	29,000	25,000	SD 247-78.	
Glenn Cunningham Lk, Dam 11	NE Douglas	Little Papillion Cr	L	14.0	1,142.0	1,121.0	922	392	PL 90-483.	
11.14.1.10	L		FRCA	3.9	1,121.0	1,085.0	392	0 0	HD 349–90.	
Harian County LK	NE Harian	Kepublican K	_ [	498.0 342.6	1,973.5	1,946.0	73,064	13,249	PL //-228. HD 992 76 DI 79 53/	5
Harry S Truman Dam & Res	MO Benton	Osage R	<u> </u>	4,005.9	739.6	706.0	209,300	55,600	-	Ė
		ò	FPCR	1,203.4	706.0	635.0	55,600	0	HD 549-81, PL 87-874 HD 578-87.	4.
Hillsdale Lk	KS Miami	Big Bull Cr	L	83.6	931.0	917.0	7,410	4,580	PL 83-780.	
			FNMCAR	76.3	917.0	852.4	4,580	0	HD 642-81.	
Holmes Park Lk & Dam 17	NE Lancaster	Antelope Cr Trib to Salt Cr.	ш	5.7	1,266.0	1,242.4	410	100	PL 85–500.	
			FCR	0.8	1,242.4	1,218.0	100	က	HD 396-84.	
Kanopolis Lk	KS Ellsworth	Smoky Hill R	шī	370.0	1,508.0	1,463.0	13,999	3,560		Ş
	()	(	Ξ.	22.8	1,463.0	1,425.0	3,560	0		ė.
Kelly Koad Dam	MO Randolph	Westerly Of	. ц	30.3	0,302.0	791 1	3 670	2 429	PL 80-838, PL 84-99. PI 89-298	
וני ביי ביי ביי ביי ביי ביי ביי ביי ביי ב			FCAR	34.6	791.0	751.1	2,429	0	HD 238–89.	
Longview Lk	MO Jackson	Little Blue R	L	24.8	0.606	891.0	1,960	930	PL 90-483.	
:	( ( ;		FCAR	22.1	891.0	810.0	930	0	HD 169–90.	
Melvern Lk	KS Osage	Marais des Cygnes R	T [	208.4	1,057.0	1,036.0	13,948	6,928	PL 83-780.	2
Milford Lk	KS Gearv	Republican R	T I	756.7	1,036.0	1.144.4	27.255	17.270	PL 73-781, HD 349-8 PL 83-780.	-
	final land		FCA	388.8	1,144.4	1,080.0	15,709	0	HD 642-81, PL 75-761	
Oahe Dam & Lk	ND 4 Counties	Missouri R	L	1,097.0	1,620.0	1,617.0	373,000	329,000	PL 78-534.	
	SD 8 Counties	0 4 - 0	FNPIMCAR	16,789.0	1,617.0	1,540.0	359,000	117,000	SD 247-78.	
Olive Crick & Dam 2	NE Lancaster	Ollve br or salt or	L III	0. 4.	1,335.0	1,335.0	174	4 4	PL 85-500	
Papio Dam Site #18 & Lk	NE Douglas	Boxelder Cr Papio Cr	· ·	7.1	1,128.2	1,110.0	262	255	PL 90-483.	
			FCAR	3.4	1,110.0	1,060.5	255	0	HD 349-90.	
Papio Dam Site #20 & Lk	NE Sarpy	Trib South Branch Papio	LL L	6.1	1,113.1	1,096.0	493	246	PL 90–483.	
0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Z Z	7.7	1,096.0	1,069.0	740	0 5	HD 349-90.	
Pawnee Lk & Dam 14	NE Lancaster	No. Middle Cr of salt Cr	F.CR.	0.1.0	1,203.5	1,244.3	728	1,28	PL 85-500. HD 396-84	
Perry Lk	KS Jefferson	Delaware R	· ·	521.9	920.6	891.5	25,342	12,202	PL 83-780.	
			Z	243.2	891.5	825.0	122	0	HD 642-81.	
Pipestem Dam & Res	ND Stutsman	Pipestem Cr	LL L	137.0	1,496.3	1,442.4	4,754	882	PL 89–298.	
Pomme De Terre Lk	MO Polk	Pomme De Terre R	Σ Σ	9.6	1,442.4	839.0	15.980	7.890	HD 266–89. PL 75–761.	
	)		FNPCAR	241.6	839.0	750.0	7,890	0	HD 549-81, PL 83-780	30.
Pomona Lk	KS Osage	110 Mile Cr		176.8	1,003.0	974.0	8,520	400	PL 83-780.	

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

Auth legis 3				1D 669_80											20 247_78	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7														
Auth		HD 549–81. PL 83–780. HD 561.81	PL 89–298.	HD 262–89. PI 81–516 HD 669–80	PL 85–500.	PL 90-483.	HD 349-90. PI 83-780	HD 549-89.	PL 75-761. HD 842-76	PL 85-500.	HD 396–84.	PL 85-500. HD 396-84	PL 90-483.	HD 349–90.	PL 78-534. SD 191-78 SD 247-78	PL 85-500.	HD 396-84.				PL 74-738.	PL 87-874.	PL 81-814.	PL 87-874.		PL 87–874.	PL 85-500.	FCA Sep 54.	210 PL 74–738.	FCA Sept 54
acres	Lower	11,013	7,192	00	196	137	0	0	14,875	255	- 200	303	246	10	9,040	208	0		124	160	0	- ! 0	747	952	42	1,147		790	210	1,730
Area in acres	Upper	4,000	9,995	7,192	490	302	137	24,777	54,179	505	255	303	493	246	19,980	475	208		489	1,430	192	87	1,411	1,184	952	2,159	2.060	3,020	1,100	3,450
its feet .L.	Lower	912.0	864.2	799.0	1,271.1	1,104.0	1,060.0	760.0	1,075.0	1,341.0	1,306.0	1,287.8	1,096.0	1,069.0	1,516.0	1.244.9	1,218.0		1,255.0	840.0	1,218.0	1,108.0	628.0	1,466.0	1,255.0	290.0	1.045.0	1,162.0	1,150.0	630.0
Elev limits feet M.S.L.	Upper	974.0	876.2	864.2	1,285.0	1,121.0	1,104.0	867.0	1,136.0	1,355.0	1,341.0	1,302.0	1,113.1	1,096.0	1,554.0	1.262.0	1,244.9		1,300.0	937.0	1,304.0	1,150.0	628.0	1,500.0	1,466.0	307.0	1.117.0	1,228.0	1,203.0	657.0
Storage 1,000	AF	346.3	101.8	144.6	4.7	3.7	1.5	887.1	1,937.4	5.3	2.8	8.0	6.1	2.7	530.7	5.6	2.0		14.6	73.4	8.0	1.7	39.8	36.2	92.0	27.1	82.0	114.7	30.2	70.2
Project pur-	asond.	FNMAR F		FMCAR	, LL I	χ. Σ	FRC F	FARPN	L L	Ш	CFR	T Z	<u> </u>	FCAR	С	<u> </u>	FCR	c Division	ш	ш	ш	ш	ΕМΔ	L	FMA	T U	Ž L L	ш	ш	ш
Stream 1		Chariton R	Little Platte R	Spring Gulch	Hickman Br of Salt Cr	Trib Big Papillion Cr	Sac R		Big Blue R	Middle Cr Salt Cr	4	Hickman Br of Salt Cr	Trib South Branch Papio	:	Saline R	Cardwell Br of Salt Cr		North Atlantic Division	Canacadea Cr	Kettle Cr	Canisteo R	Aylesworth Cr	Ponopoco Cr	North Branch Potomac R		Tulpehocken CR	Cowanesque R	West Branch Susque-	nanna K. Ouleout Cr	Bald Eagle Cr   F
State/county		IA Appanoose	MO Clay	CO Douglas	NE Lancaster	NE Douglas	MO Cedar		KS Riley	NE Seward	Ļ	NE Lancaster	NE Sarpy	:	KS Russell	NE Lancaster			NY Steuben	PA Clinton	NY Steuben	PA Lackawanna	PA Carbon, Monroe	MD Garret		PA Lebanon Berks	PA Tioda	PA Clearfield		PA Centre
Project name 1		Rathbun Lk	Smithville Lk	Spring Gulch Impankment	Stagecoach Lk & Dam 9	Standing Bear Lk & Dam 16	Stockton		Tuttle Creek Lk	Twin Lakes & Dam 13		Wagon Irain Lk & Dam 8	Wehrspann Lk & Dam 20	:	Wilson Lk	Yankee Hill Lk & Dam 10			Almond Lake	Alvin R. Bush Dam	Arkbort Dam	Aylesworth Cr Lk	Beltzville Dam & LK	Bloomington Lk	)	Blue Marsh Dam & Lk	Cowanesque Lk	Curwensville Lk	East Sidney Lk	Foster Joseph Sayers Dam

80 PL 79–526. 1,780 PL 80–858. 290 PL 80–858. 1530 PL 87–474. 150 PL 87–520. 150 PL 87–474. 150 PL 77–228. 680 PL 77–228. 680 PL 77–228. 680 PL 77–238. 690 PL 74–738.	! ⊢		0 Pt 75–761. 0 Pt 71–761. 1,550 FCA 1988. 1,350 Pt 78–534. 0 Pt 78–534. 12,700 RHA 1899. 910 FCA Oct 65.	176 FCA of 22 Dec 44. 5,500 RHA 1910. 17,600 RHA 1930. 36,600 RHA 1930. 12,000 RHA 1930. 7,000 RHA 1930. 8,000 RHA 1930. 13,400 RHA 1930.	20,000 RHA 1930. 28,300 RHA 1930. 16,500 RHA 1930. 20,000 PL 71–520. 12,400 PL 71–520. 9,500 PL 71–520. 3,540 PL 71–520.
1,830 2,530 659 10,800 8,300 1,630 3,340 1,430			3,580 1,690 1,500 385 37100 12,790	1,800 1,11,810 17,950 17,950 17,950 12,680 12,680 12,680 13,440 13,440	20,800 20,200 20,125 22,125 21,100 21,100 22,100 11,500 22,10,500 33,725 3,725
1,300.0 1,582.0 1,554.0 1,125.0 786.0 622.8 1,572.0 1,081.0 973.0			652.0 586.7 504.0 938.5 551.0 530.0 1,192.7	1,074.0 722.8 686.5 674.0 666.5 659.5 650.0 644.5	630.0 619.0 610.0 602.0 591.0 582.0 571.0 559.0
1,450.0 1,610.0 1,053.0 1,005.0 1,005.0 1,131.0 1,131.0 1,131.0 1,131.0 1,131.0 1,131.0 1,131.0		1,266.0 539.0 703.6 712.0	680.0 591.0 505.0 940.0 616.0 579.0 1,194.0	1,080.0 725.1 687.2 675.0 667.0 660.0 651.0 645.5	631.0 620.0 611.0 603.1 592.1 572.1 561.1
79.9 60.7 248.5 248.0 514.0 11.6 52.5 66.5		68.6 8.0 1.8 439.0	0.04 0.01 0.01 0.01 0.07 0.07	3.7 7.8 8.0 8.0 17.8 6.2 6.2 7.2 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4	20.4 28.7 16.8 19.1 12.2 24.2 9.0 9.0
r r <u>A</u> rrrgrrrrr	Il Division	∑ L Z Z L (	O S S D T T T T D T T T T T T T T T T T T	S LZZZZZZZZ	z z z zzzzz
Lehigh R Jackson R Dyberry Cr Byberry Cr Baystown Br Raystown Br Crooked Cr Trigga R Trigga R Otselic R Codorus Cr	North Central Division	Sheyenne R	llinois R	Park R Mississippi R	Mississippi R
PA Carbon, Luzerne, Monroe. VA Alleghany, Bath PA Wayne PA Wayne PA Huntingdon PA Susquehanna PA Tioga NY Broome PA York	1	ND Barnes	WI Brown IL Grundy WI Pierce IL Tazwell IL Tazwell MN Cass MN Bigstone, Lacqui,	5	MN Hachosse MN Hachosse MN Vernon WI Vernon MI Crawford A Allamakee IA Clayton IA Jackson IA Jackson IA Jackson IA Jackson IA Jackson IA Scott IL Rock Island
Francis E. Walter Dam & Res	(	Badhill Dam & Res	Depree L&D	Homme Dam & Res	L&D 8  L&D 9  L&D 10  L&D 11  L&D 12  L&D 13  L&D 14

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

444	260	PI 71-520	PL 71-520.	PL 71-520.	PL 71-520	PI 71-520	PI 71-520	11 120.	PL /1-520.	FCA of 22 Jun 36.	PL 73-184.	RHA of 1882 1895.	RHA of 1882 1885	RHA of 1882 1885			71 4 4 2 6 1 6 3 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6	FL / I=126.	FCA JUN 36.		PL 74-738.	RHA of 1946.	PL 73-184.	RHA of 1899.	RHA of 1899	RHA 1885.	FCA Dec 44	PI 75-761	PI 75_761	FC 4 1036	.000	RHA of 1899.	FCA 1936.	_	RHA of 1937 1945.	RHA of 1937 1945.				KHA of 1882 1885.	FCA 1936.	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	KHA 01 1699.			20 PL 78–534, 83–780.
acres	Lower	12 400	7.200	12,600	31,800	7.550	9,900	0,0	8,230	6,400	10,500	107.200	42.0	67	200	,	1 6	1,320	5,150	168,500	0	20	27,800	13,000	12,000	0	287.300	8 000	0,00	10.050	0,930	8.200	5,950	0	20	8.600	1 020	070	2 .	115	4,000	000	02,000			20
Area in acres	Upper	13 000	7.580	13,300	33,500	7 960	0 390	5,0	8,660	13,500	10,500	139,000	447	74	1 850	,	5 5				3,300	20	27,800	13,900	13,700	568	288.800	65 400	00,8	12,400	7,400	10.600	16,700	5,950	20	8.800	1 155	1 171		45	10,500	1	96,700			810
its feet 3.L.	Lower	544 0	536.0	528.0	517.2	476.5	469.6	0.00	459.1	931.2	429.0	1.293.2	592.8	0 889	577 5	2000	0.00	402.0	937.6	743.5	585.0	578.2	440.0	1.227.3	1,270.3	602.1	1.173.5	728.0	690.0	0.020	0.0	1.214.3	836.0	810.0	750.0	799.0	458.0	735.4	1 0	652.8	972.0	0	1,230.9			830.5
Elev limits feet M.S.L.	Upper	545 1	537.1	529.1	518.2	481.5	470 1	- 0	429.6	941.1	429.0	1.295.7	6010	6942	570 0	270.0	0.00	463.0	941.1	746.8	0.097	581.9	440.0	1.230.3	1,274.4	608.5	1,174.0	780 0	728.0	0.520	0.100	1.218.3	890.0	836.0	750.0	801.0	459.0	7387		8.969	981.0	0	8.000,1			1,017.0
Storage	AF	12.1	7.5	11.0	55.0	ν.	9 0	9 6	4.8	119.3	0.0	300.2	9	40	2.0	ic	9 0	. 0	23.9	452.0	337.4	0.3	0.0	40.4	52.4	4.6	1.810.0	1 670 0	72.0	0.0	0.00	37.5	586.0	90.0	0.0	17.4	-	7.7			78.6	1	90.7			52.4
Project pur-	pose <sup>2</sup>	Z	z	z	z	z	: z	2 2	z	ပ	z	z	z	: z	END		2 2	2 1	: د	Z	L	z	z	z	z	z	Ψ		. 0	ا ک	2	z	ш	_	z	z	z	: 2	2 2	z	<u>۔</u>	-	z	2000	DIVISION	
Office and a second		Mississippi R	Mississippi R	Mississippi R	Mississippi R	Mississippi R	Mississippi R		Mississippi K	Minnesota R	Illinois R	Leech R	Fox R	Fox R	Chicago San Ship Capal		TOX N	L SIOIIII	Minnesota K	Fox R	Genesee R	Calumet	Illinois R	Pine R	Mississippi R	Fox R	Red Lake R	Des Monies R				Sandy R	Des Moines R		Mississippi R	Mississippi R	Illinois B	D > C	<u> </u>	70X K	Bois De Souix		Mississippi R	1	New Eligialid Division	West R
Storio/Octob	Otato/Odnity	II Rock Island	IL Mercer	IL Henderson	IA Lake	MO I ewis	II Adams	The Course	MC Polke	MN Chippewa Swift	IL Brown	MN Cass	WI Brown	WI Outagamie	II Will	W. Outogomio	WI Odtagaille	IL Laballe	Min Swift, Lacqui, Parie	WI Winnebago	NY Livingston	IL Cook	IL Peoria	MN Crow Wing	MN Itasca	WI Outagamie	MN Clearwater	IA Marion		MAI Traverso	SD Roberts	MN Aitkin	IA Polk		MN Hennepin	MN Hennepin	1 S. C.	WI Outscamio	W Odagaille	WI Outagamie	MN Traverse	SU NODEIIS.	MIN Cass Itasca			VT Windham
Project tomor		18716	L&D 17	L&D 18		1.8D 20	1 % D 21	200	L&D 22	Lac qui Parle Dam & Res	Lagrange L&D	Leech Lake Dam & Res	Little Kaukanna I &D	Little Chute I &D	Lockbort Lock	Control of the contro	Managilla I. 9 Dam	Marselles Lk & Dall	Marsh Lake Dam & Res	Menasha Dam Lk Winnebago	Mount Morris Dam	O'Brien L&D	Peoria L&D	Pine Dam & Res	Pokedama Dam & Res	Rapid Croche L&D	Red Lake Dam & Res	Red Rock Dam & Res		Documentation Control Doc	Nesel valid! Collide Nes	Sandy Lake Dam & Res	Saylorville Dam & Res		St Anthony Falls Lwr L&D	St Anthony Falls Upr L&D	Starved Rock   &D	Use Appleton 1.8.D	יייייייייייייייייייייייייייייייייייייי	Upper Kaukauna L&D	White Rock Dam & Res	0	Willingoshish Dam & Res			Ball Mountain Lk

Barre Falls Dam	MA Worcester	Ware R	ш	24.0	807.0	761.0	1,400	0	PL 78-228.	
Birch Hill Dam	MA Worcester	Millers R	ш	49.9	852.0	815.0	3,200	0	PL 75-761.	
Black Rock Lk	CT Litchfield	Branch Brook	ш	8.5	520.0	437.0	190	21	PL 86-45.	
Blackwater Dam	NH Merrimack	Blackwater R	L I	46.0	266.0	515.0	3,280	0	PL 75-111.	
Buttumville Lk	MA Worcester	Little R	<u></u>	11.3	524.0	492.5	230	200	PL 77-228.	
Colebrook River Lk	CT Litchfield	West Branch		2.03	761.0	708.0	1,185	750	PL 86-645.	
	MA Bekshire	Farmington R.								
Conant Brook Dam	MA Hampden	Conant Brook	L.	3.7	757.0	694.0	128	0	PL 86-645.	
East Brimfield Lk	MA Hampden, Worcester	Quinebaug R	ш	29.9	653.0	632.0	2,300	360		
Edward MacDowell Lk	NH HIIIsboro	Nubanusit Brook	ш	12.8	946.0	911.0	840	165	PL 75-111.	
Everett Lk	NH Hillsboro, Merrimack	Piscataquog R	ш	91.5	418.0	340.0	2,900	130	PL 75-761.	
Franklin Falls Dam	NH Belknap. Merrimack	Pemigewasset R	ш	150.6	389.0	307.0	2.800	440	PL 75-111.	
Hancock Brook Lk	CT Litchfield	Hancock Brook	ш	3.9	484.0	460.0	266	40	PL 86-645.	
Hodges Village Dam	MA Worcester	French R	ш	13.3	501.0	465.5	740	C	PI 77-228	
Hop Brook I k	CT New Haven	Hop Brook	. ц	0.00	364.0	310.0	270	, 2	PI 86-645	
Hopkinton I k	NH Merrimack	Contocook B	. ц	70.7	416.0	380.0	3 400	220	PI 75-761	
Koightville Dam	MA Hampshire	Westfield R	. ц	49.0	910.0	480.0	080	9	PI 75-761	
i	MA Lampdon Lamp	Middle Br Weetfield D	. 4	0.00	0.026	718.0	270	275	DI 85 500	
	shire	Middle Di, Westleid IV	_	0.54	2.0	5	2	273		
Manafiah Hollow 1 k	CT Tolland	S CledateN	ц	49.2	257.0	205.5	1 880	200	PI 77_228	
New Bedford-Fairhayen Hurr Barrier	MA Bristol		. ц	4.0	0.0	0.00		000	PI 85-500	
Note Dealord alliaven name came ::	Windson	0 00000		0.0	0.0	2.0	,	20 1	75 75 10	
Notifi halialid LK	VI WINGSOI	Ollauquecilee A		0.00	0.46.0	423.0	, 100	213	FL /3-/61.	
North Springheid LK	VI Windsor	Black K	L	20.0	545.5	467.0	1,200	001	PL /5-/61.	
Northfield Br Lk	CT Litchfield	Northfield Br	ш	2.4	216.0	200.0	29	7	PL 86-645.	
Otter Br Lk	NH Cheshire	Otter Brook	ш	17.6	781.0	701.0	374	2	PL 83-780.	
Stamford Hurr Barrier	CT Fairfield		ш	0.0	0.0	0.0	0	0	PL 86-645.	
Surry Mountain Lk	NH Cheshire	Ashuelot R	ш	31.7	550.0	500.0	970	260	PL 75-761.	
Thomaston Dam	CT Litchfield	Naugatuck R	. ш	42.0	494.0	380.0	096	ì	PI 78-534	
Townshend Lk	VT Windham	West R	ш	32.9	553.0	478.0	735	95	PL 78-534. P	1.83-780.
A I VIII V	MA Worcester	Fast Br Tully R	. ц.	20.5	0899	636.0	1,130	282	PI 75-761	
Holon Village Dam	VT Orange	Ompompanoosiic R	. ц	38.0	564.0	420.0	740		PI 74-738	
West Hill Dam	MA Wordester	West P	. ц	12.5	264.0	0.84	1 025	0 0	DI 78-534	
West Till Dalli	MA Wolcestel	West N		4.7.7	0.400	204.0	1,025		PL 76-334.	
West Indinspon	CI WINGHAM	Cullebaug R		23.0	242.0	0.000	057,1	000		
Westville Lake	MA Worcester	Quinebaug K	L	0.11	27.70	225.0	913	3	PL //-228.	
		North Pacific Division	c Division		-					
Albeni Falls Dam, Lk Pend, Oreille	ID Bonner	Pend Oreille R	FNP FNP	1,155.0	2,062.5	2,049.7	95,000	86,000		1
Applegate LK	OR Jackson	Applegate R	ĭ	79.7	0.788,1		200	7	PCA 1962, PL 87-674, Pl 87-874	- 81-814,
Big Cliff Dam	OR Marion, Linn	N Santiam R	۵	3.5	1,206.0	1,182.0	130	86	HD 544, PL 75–761, PI	5-761, PL
o										
Blue River Lk	OR Lane	Blue R	L	6.5	1,357.0	1,350.0	975	940		
			Z	78.8	1,350.0	1,180.0	940	133		
Bonneville L&D Lk	WA Skamania	Columbia R	₽	138.0	77.0	20.0	20,800	19,850		
Chena River Lakes	AK North Star Burough	Chena R	LL (	34.0	506.7	490.0	5,400	400		
Chief Joseph Dam Rufus Woods Lk	WA Douglas, Okanogan	Columbia R	۱ ـ	192.3	956.0	930.0	8,400	6,800		9-525.
Cottage Grove Lk	OR Lane	Coast Fk, Willamete R	<u> </u>	29.8	791.0	750.0	1,155	252	HD 544, PL 75-761	5-/61.
Cougar Lk	OK Lane	South FK	FND	11.3	1,699.0	1,690.0	1,280	1,235		

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

		č		Storage	Elev limits feet M.S.L.	ts feet	Area in acres	acres	-
Project name 1	State/county	Stream	pose	1,000 AF	Upper	Lower	Upper	Lower	Auth legis 3
Detroit Lk	OR Marion	North Santiam	P F FNPI	9.9 19.1 281.6	1,532.0 1,569.0 1,563.5	1,516.0 1,563.0 1,450.0	635 3,490 3,455	602 3,455 1,725	PL 83–870. HD 544, PL 75–761.
Dexter Dam	OR Lane	Middle Fk, Willamette R Cow R	9 H H I	40.3 4.8 5.5	1,450.0 695.0 835.0	1,425.0 690.0 832.0	1,725	1,415	HD 544, PL 75–761. HD 544.
Dworshak Dam and Res	ID ClearwaterOR Lane	North Fk, Clearwater R Fall Cr		65.0 2,016.0 7.5	832.0 1,600.0 834.0	770.5 1,445.0 830.0	1,815 17,090 1,865	9,050 1,760	PL 75–761. HD 403, PL 87–874. HD 531.
Fern Ridge Lk	OR Lane	Long Tom R	Z Z	15.7	375.1	373.5	10,305	9,340	PL 81-516 HD 544. BI 75 761
Foster Lake	OR Linn	South Santiam R	2 4 5	9.4.6	641.0	637.0	1,260	1,195	FL /3-/81 HD 544 DI 86-645
Green Peter Lk	OR Linn	Middle Fk, Santiam R		18.3	1,015.0	1,010.0	3,705	3,605	HD 531. BI 81-516 BI 83-780
Hills Creek Lk	OR Lane	Middle Fk, Willamette R		5.6	1,543.0	1,541.0	2,850	2,710	FL 81-316, FL 83-780. HD 531. BI 84-546
Howard Hanson Dam	WA King	Green R		80.0	1,206.0	1,141.0	1,750	763	FL 81-316. HD 531. Pl 81 516
Ice Harbor Dam Lk Sacajawea	WA Walla, Walla, Frank-	Snake R	<u> </u>	24.9	440.0	437.0	8,370	8,210	HD 704, PL 79–14.
John Day Dam Lk Umatilla	OR Sherman	Columbia R	T I	158.0	268.0	265.0	55,000	52,000 49,000	HD 531. PL 81–516.
Libby Dam Lk Koocanusa Little Goose L&D Lk Bryan	MT Lincoln	Kootenai RSnake R Middle Fk, Willamette R	F Z a	4,979.5 49.0 12.2	2,459.0 638.0 825.0	2,287.0 633.0 819.0	46,365 10,030 2,090	14,391 9,620 1,860	HD 531, PL 81–516. HD 704, PL 79–14. HD 544.
Lost Creek Lk	OR Jackson	Rogue R	- K - K - K - K - K - K - K - K - K - K	324.2 315.0 43.6 13.9	926.0 1,872.0 738.0 3,060.0	733.0 3,055.0	3,430 8,900 2,817	2,090 1,800 8,540 2,745	PL 75–761. HD 566, PL 87–874. HD 704, PL 79–14. PL 79–526.
Lwr Monumental L&D Lk HG West	WA Walla, Walla, Frank-	Snake R	ī 🕏	20.0	3,055.0	537.0	6,700	802 6,550	HD 704, PL 79–14.
McNary L&D, Dam Lk Wallula	WA Benton	Columbia R	₽	185.0	340.0	335.0	38,800	36,000	HD 704, PL 79–14.
Mill Creek Dam Lk	WA Kiickitat	Mill Cr White R Columbia R	<u>ш</u> ш <u>а</u>	7.5 106.3 52.5	1,265.0 1,215.0 160.0	1,205.0 895.0 155.0	225 963 11,200	53 0 10,350	HD 578, PL 75–761. PL 74–738. HD 531, PL 81–516.
Willow Creek Lk	OK Wasco	Willow Cr	F FMCA	11.6	2,113.5	2,047.0	269	96	PL 89–298. HD 601, PL 93–251.

		Onio River Division	Division								
Allegheny L&D 2	PA AlleghenyPA Allegheny	Allegheny R	zz	0.0	721.0 734.5	710.0	00	00	RHA 1935. RHA 1935.	10,10	
Allegheny L&D 4	PA Allegheny Westmore- land.	Allegheny R	z	0:0	745.0	734.5	0	0		oi.	
Allegheny L&D 5	PA Armstrong	Allegheny R	z	0.0	756.8	745.0	0	0	RHA 1912	<b>~</b> I	
Allegheny L&D 6	PA Armstrong	Allegheny R	zz	0.0	769.0	756.8	0 0	00		ci c	
Allegheny L&D 8		Allegheny R	2 2	9 0	800.0	782 1	0 0	0 0		7 1935	
Allegheny L&D 9	PA Armstrong	Allegheny R	zz	0.0	822.0	800.0	0	0			
Allegheny Res Kinzua Dam	PA Warren	Allegheny R	: 1	0.709	1,365.0	1,328.0	21,180	12,080	_	, œi	
			FPCAR	249.0	1,328.0	1,240.0	12,080	1,900			
Alum Cr Lk	OH Delaware	Alum Cr	T 1	53.1	901.0	888.0	4,852	3,387	PL 87-874	4.	
Atwood Lk	OH Tuscarawas	Indian Fk Cr	<u> </u>	26.1	941.0	928.0	2,460	1,540	PW 1933.		
			FCR	7.6	928.0	922.5	1,540	1,250			
Barkley Dam Lk Barkley	Ky Lyon, Livgst	Cumberland R	L C	1,213.0	375.0	359.0	93,430	57,920	PL 79–525	5.	
			Lz	610.0	354.0	233.0	45.210	017,54			
Barren River Lk	KY Allen, Barren	Barren R	ш	558.8	590.0	552.0	20,150	10,000	PL 75-261	<del>-</del> :	
;		1	FMR	190.3	552.0	525.0	10,000	4,340			
Beach City Lk	OH Tuscarawas	Sugar Cr	L L	6.69	976.5	948.0	6,150	420	PW 1933.		
4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	000000000000000000000000000000000000000	0 000 B	5 1	0.00	0.0	0.00	7 0 7	725	07 074	_	
Deecl The Commission	W Waylid	Dedc:	T Z	5.0	592.0	583.5	725	460	r L 0/ -0/	ŕ	
Belleville L&D	WV Wood	Ohio R	z	0.0	582.0	260.0	0	0	RHA 1909.	9.	
	OH Meigs		·							,	
Berlin LK	OH Manoning, Portage	Manoning K	FMCAR	38.3	1,032.0	1,024.7	3,500	3,590	PL /5-/67	÷	
Bluestone Lk	WV Summers	New R	ш	592.6	1,520.0	1,410.0	9,180	2,040	PL 74-738	89	
			FCR	7.5	1,410.0	1,406.0	2,040	1,800		<del>-</del>	
Bolivar Dam	OH Stark, Tuscarawas	Sandy Cr	ш	149.6	962.0	895.0	6,500	0			
Brookville Lk	IN Franklin	E Fork of Whitewater R	FMR	128.4	748.0	713.0	5,260	2,430		÷	
Buckhorn Lk	KY Leslie	Middle Fk of Kentucky R	L 0	135.8	840.0	782.0	3,610	1,230	PL 75–761	÷	
Burnsville Lk	WV Braxton	L Kanawha R	<u></u>	51.5	825.0	789.0	1.902	965	PL 75-761	<del>-</del>	
			FCAR	10.2	789.0	776.0	965	553			
CJ Brown Dam & Res	OH Clark	Buck Cr	ш	26.8	1,023.0	1,012.0	2,720	2,120	PL 87-874.	4	
CM Harden Lk	IN Parke	Raccoon Cr	щ	83.5	0.069	661.0	3,910	2,060	PL 75-76	-	
			FAR	33.1	661.0	640.0	2,060	1,100			
Caesar Cr Lk	OH Warren	Caesar Cr	FMAD	140.2	883.0	849.0	6,110	2,830	PL 75–761	÷	
Cacles Mill 1k	IN Dutman	Mill Cr	ـــــــــــــــــــــــــــــــــــــ	201.0	7049.0	0.000	4 840	1 400	PI 75_76	-	
Cannelton L&D	KY Hancock	Ohio R	. z	0.0	383.0	358.0	0	0	RHA 1909	: _	
	IN Perry		-								
Carr Fk Lk	KY Knott	Carr Cr	L	25.1	1,055.0	1027.0	1,120	710	PL 87-874	4	
2 2 2 1 1 1	20100	0 2 2 2 2 2	FAR	10.8	1,027.0	1009.0	710	530	7 7 10	c	
Cave Kun LK	KY Kowan	Licking K	FAR	391.5	730.0	720.0	14,870	6,790	8,270   PL 74-738 6,790	xo	
								,			

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

					200				
		ć		Storage	Elev limits feet M.S.I.	its feet	Area in	acres	-
Project name ¹	State/county	Stream ¹	pose 5	1,000 AF	Upper	Lower	Upper	Lower	Auth legis <sup>3</sup>
Center Hill Lk	TN Dekalb	Caney FK	ШΩ	762.0	685.0	648.0	23,060	18,220	PL 75–761.
Charles Mill Lk	OH Ashland	Black Fk	LL	80.6	1,020.0	997.0	6,050	1,350	PW 1933.
2 mc4	TAI OHOUSE	o de la constantina della cons	FCR	5.5	997.0	993.0	1,350	827	906 IO 306
כופמוומוו ראט	IN Cliedilan	Cullibelialid R	LZ	0.8.0	382.0	345.0	7,430	0,000	KIA 1940, FL 390.   Pl 396
Clendening Lk	OH Harrison	Brush Fk	Ľ	27.5	910.5	898.0	2,620	1,800	PW 1933.
Conemaugh River Lk	PA Indiana, Westmore-	Conemaugh R	FGR.	8.0	898.0 975.0	893.0	1,800	1,430	PL 74–738, PL 75–761.
Cordell Hull Dam & Res	land. TN Smith	Cumberland R	H.	17.8	504.5	499.0	12.200	9.820	
			R	0.0	499.0	424.0	9,820	0	
Crooked Cr Lk	PA Armstrong	Crooked Cr	LL 10	89.4	920.0	840.0	1,940	350	PL 74–738, PL 75–761.
Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	- IN Clay	ODG) N		496.0	651.0	631.0	27,700	21,880	
Dashields L&D	PA Allegheny	Ohio R	z	0.0	692.0	682.0	0	0	
Deer Cr Lk	OH Pickaway	Deer Cr	T 1	81.5	844.0	810.0	4,046	1,277	PL 75–761.
Delaware Lk	OH Delaware	Olentandv R	ź "	118.0	947.0	915.0	8,550	1.270	PL 75–761
			FCAR	5.6	915.0	910.0	1,270	920	
Dewey Lk	KY Floyd	Johns Cr	IL I	76.1	686.0	650.0	3,340	1,100	PL 75–761
y i dolii O	OH Miskingim	l icking R	Ž T	256.5	290.0	737.0	10,100	880	PI 75-761
			FCR	4.4	737.0	734.0	1,560	1,330	
Dover Dam	OH Tuscarawas	Tuscarawas R	L	203.0	916.0	858.0	10,100	0	
E Br Clarion River Lake	PA EIK	E Br Clarion R	LL L	19.0	1,685.0	1,670.0	1,370	1,160	PL 78–526.
E Fk Res Wm H Harsha Lk	OH Clermont	E Fk Little Miami R	r Ir	202.2	795.0	733.0	4,600	2,160	PL 75–761.
			FMCAR	73.6	733.0	683.0	2,160	820	
East Lynn Lk	WV Wayne	E Fk Twelvepole	ני ני	65.3	701.0	656.0	2,351	1,005	PL 75–761.
Emsworth L&D	PA Allegheny	Ohio R	źz	0.0	710.0	692.0	9	0	RHA 1909.
Fishtrap Lk	KY Pike	Levisa Fk	ш	126.7	825.0	757.0	2,681	1,131	PL 75–761.
::			FCAR	27.2	757.0	725.0	1,131	269	
Gallipolis L&D	WV MasonOH Gallia	Ono R	z	0.0	538.0	0.616	O :	0	KHA 1935.
Grayson Lk	KY Carter	L Sandy R	ш	9.68	681.0	645.0	3,633	1,509	PL 86–645.
			FCAR	10.7	645.0	637.0	1,509	1,159	
Green R L&D 1	KY Henderson	Green K	zz	0.0	349.1	337.3	0 0	00	KHA 1888.   BL> 1988
Green R L&D Z	KY Tavlor	Green R	ZΨ	479.1	713.0	675.0	19.100	8 210	KHA 1888. PI 75–761
	2		FAR	81.5	675.0	664.0	8,210	6,650	
Greenup L&D 3	KY GreenupOH Scioto	Ohio R	z	0.0	515.0	485.0	0	0	RHA 1909.

Hannibal L&D	WV Wetzel	Ohio R	z	0.0	623.0	602.0	0	0	RHA 1909.	
Hildebrand L&D	WV Monongalia	Monongahela	z	0.0	835.0	814.0	0	0	RHA 1950.	
Huntington Lk	N Hunt	Wabash R	: 1	140.6	798.0	749.0	7,900	906	PL 85-500.	
			FR	8.4	749.0	737.0	006	200		
J Percy Priest Dam & Res	TN Davidson	Stones R	ш	252.0	504.5	490.5	22,720	14,400	PL 75-761.	
			윤	15.0	490.5	489.5	14,400	14,000		
			FPR	0.0	489.5	483.0	14,000	11,630		
			X.	0.0	483.0	480.0	11,630	10,570		
JW Flannagan Dam & Res	VA Dickenson	Pound R	ш	78.6	1,446.0	1,396.0	2,098	1,143	PL 75-761.	
o			FMCR	16.5	1,396.0	1,380.0	1,143	310		
Kentiicky R I &D 1	KY Carroll	Kentiicky R	z	0.0	430.0	421.8	C	С	RHA 1879	
Kentucky R L&D 2	KY Henry Owen	Kentucky R	: z	0.0	444.0	430.0	0		RHA 1879	
Konticky B L&D 3	KY Honny Owen	Kentiicky B	: 2	000	157.1	0.777	0 0	0 0	PHA 1879	
Kentucky R I &D 4	KY Franklin	Kenticky R	. z	0.0	470 4	457.1	0 0		RHA 1879	
l aural Rivar I k	KY Laurel Whitley	alrel R	. 0	185.0	1018.5	0 080	090 9	4 200	PI 86-645	
		,	. 🗠	250.6	0.000	760.0	4 200	5		
l pesvillia I aka	OH Carroll	McGuire Cr	: ц	17.9	977 5	063.0	1 470	100	DW 1933	
	)		FCR	2.5	963.0	957.0	1000	628		
I ondon I &D	W/V Kanawha	Kanawha R	. z	0	6140	590.0		0	RHA 1930	
Lovalhanna I k	PA Westmoreland		: LL	93.3	975.0	910.0	3.280	210		
	5		. Ц					i		
M - Kirwan Dam & Bes	OH Portage	W Br Mahoning B	2 ц	0.00	000	0.0	3 240	2 650	PI -74-738	
MI O MI WALL DALL & Nes	OII rollage	W. Di Manolinig N	۵ کر <u>تا</u>	22.0	0.000	051.0	2,240	2,030	PI 75_761	
7 - 20 20100000	0 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ś	22.3	1 162.5	0.000	2,000	2000	DI 74 730	
Mailolillig of En	TA AIIIISII OIIG	Manoring C	_ L	7.4	1,102.0	1,030.0	2,370	170		
			2	- 0	0.000,	0.000	2007	2		
Markiand L&D	IN Switzerland	Ono R	z	0.0	455.0	420.0	>	>	KHA 1909	
	KY Gallatin		-	(	0	0	•			
Marmet L&D	WV Kanawha K	Kanawha	Zι	0.0	590.0	566.0	۰ آ	0 ;	KHA 1930.	
Martins Fk Lk	KY Harlan	Martins Fk of Clover R		14.3	1,341.0	1,310.0	278	340	PL 89-298.	
			FAR	3.7	1,310.0	1,300.0	340	274		
	:		~ ∶	3.7	1,300.0	1,265.0	274	0		
Maxwell L&D	PA Fayette Washington	Monongahela R	z	0.0	763.0	743.5	0	0	RHA 1909.	
McAlpine L&D	KY Jetterson	Onio R	z	0.0	420.0	383.0	0	0		
	IN Clark	:	:							
Meldani L&U	KY Bracken	Ohio K	z	0.0	485.0	455.0	0	0	KHA 1909.	
	OH Clermont									
Mississinewa Lk	IN Miami	MIssissinewa R	ш	293.2	779.0	737.0	12,830	3,180	PL 85-500.	
			<del>ا</del>	51.9	737.0	712.0	3,180	1,280		
Mohawk Dam	OH Coshocton	Walhonding R	ட	285.0	890.0	799.2	7,950	0	PW 1933.	
Mohicanville Dam	OH Ashland	Lk Fork	ш	102.0	963.0	932.0	8,800	0	PW 1933.	
Monongahela R L&D 2	PA Allegheny	Monongahela R	z	0.0	718.7	710.0	0	0	RHA 1902.	
Monongahela R L&D 3	PA Allegheny	Monongahela R	z	0.0	726.9	718.7	0	0	RHA 1905.	
Monongahela R L&R 4	PA Washington West-	Monongahela R	z	0.0	743.5	726.9	0	0	RHA 1909.	
ò	moreland.	o								
Monongahela R L&D 7	PA Greene, Fayette	Monongahela R	z	0.0	778.0	763.0	0	0	RHA 1922.	
Monongahela R L&D 8	PA Greene, Fayette	Monongahela R	z	0.0	797.0	778.0	0	0	RHA 1922, 1950, 1973.	950, 1973.
Monroe Lk	IN Monroe	Salt Cr	ш	258.8	226.0	538.0	18,420	10,750	FCA 1958.	
			FMA	159.9	538.0	515.0	10,750	3,280		
Montgomery Island L&D	PA Beaver	Ohio R	z	0.0	682.0	664.5	0		RHA 1909.	

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

	0	Č	Project pur-	Storage	Elev limits feet M.S.L.	its feet L.	Area in acres	acres	A . A
Project name	State/county	Stream	pose <sup>2</sup>	AF.	Upper	Lower	Upper	Lower	Auth legis
Morgantown L&D	WV Monongalia Monongahala R	Z	0.0	814.0	797.0	0	0	RHA 1909	
Mosquito Cr Lk	OH Trumbull	Mosquito Cr	шi	21.7	904.0	901.4	8,900	7,850	PL 75–761.
7 - 2000	O	O paisodo No Para Para Para Para Para Para Para Par	FMCAR	80.4	901.4	899.9	7,850	7,220	DI 97 974
N Fk Pound Lk	VA Wise	N Fk Pound R	. LL	0.0	1,644.0	1,611.0	349	154	PL 86-645.
			FMCR	1.3	1,611.0	1,601.0	154	106	
New Cumberland L&D	WV Hancock	Ohio R	z	0.0	664.5	644.0	0	0	RHA 1909.
Newburgh L&D	KY Henderson	Ohio R	z	0.0	358.0	342.0	0	0	RHA 1909.
Nolin Lk	IN Warrick	Nolin R	г. 0	439.2	560.0	515.0	14,530	5,790	PL 75–761.
Ohio R L&D 52	KY McCracken	Ohio R	źz	0.0	302.0	290.0	0,,	0,50	RHA 1909, 1910, 1918.
Ohio R L&D 53	IL MassacKY Ballard	Ohio R	z	0.0	290.0	276.6	0	0	RHA 1909, 1910, 1918.
Old Hickory L&D	TN Davidson Sumner	Cumberland R	<u>a</u> :	63.0	445.0	445.0	22,500	19,550	19,550 RHA 1946.
Opekiska – & –	W/V Monongahela	Monongabela R	zz	357.0	857.0	375.0	19,550	0 0	RHA 1950
Paint Cr Lk	OH Ross, Highland	Paint Cr	: LL	124.7	845.0	798.0	4,761	1,190	PL 75–761.
			FMCAR	11.4	798.0	787.5	1,190	140	
Paintsville Lk	KY Johnson	Paint Cr	FCAR	32.8	731.0	709.0	1,867	1,139	PL 89–298.
Patoka Lk	IN DuBois	Patoka R	L i	121.1	548.0	536.0	11,300	8,880	PL 89–298.
Piedmont x	OH Harrison	Stillwater Cr	FINCAR	32.2	536.0 924.6	913.0	3,880	2,010	PW 1933
			FCR	8.6	913.0	0.606	2,310	1,987	
Pike Island L&D	WV Ohio	Ohio R	z	0.0	644.0	623.0	0	0	RHA 1909.
Pleasant Hill Lk	OH Ashland	Clear Fk	ш	74.2	1,065.0	1,020.0	2,600	850	PW 1933.
:			FCR	5.5	1,020.0	1,012.5	850	627	
R D Balley Lk	WV Mingo, Wyoming	Guyandot K	FCAR	169.5	1,155.0	1,035.0	2,850	630	PL 87–874.
Racine L&D	WV Mason	Ohio R	z	0.0	260.0	538.0	0	0	RHA 1909.
21 20 20 20 20 20 20 20 20 20 20 20 20 20	OH Meigs	4	L	2	2.0	0.00	000	2	125 35 10
Rough Rivel LK	Glayson, bieckimidge	A lignox	E M	90.2	495.0	430.0	5,100	2,5	FL /3-/01.
Salamonie Lk	IN Wabash	Salamonie R	Ш	202.9	793.0	755.0	9,340	2,860	PL 85-500.
			Æ	47.6	755.0	730.0	2,860	926	
Senecaville Lk	OH Guernsey	Seneca Fk	LL L	45.1	842.5	832.2	5,170	3,550	PW 1933.
Shenango River Lk	PA Mercer	Shenango R	ξL	151.0	919.0	896.0	11,090	3,560	PL 75–761.
	_		FCAR	29.9	896.0	885.0	3,560	1,910	

Smithland L&D	KY Livingston	Ohio R	z	0.0	324.0	302.0	0	0	RHA 1909.
Summersville Lk	WV Nicholas	Gauley R	ш	221.9		1,1652.0	4,913	2,790	PL 75-761.
			FRCA	161.8	1,652.0	1,535.0	2,790	514	
Sutton LK Tappan LK	WV BraxtonOH Harrison	L Stillwater Cr	F CAK	60.0 26.5	925.0	850.0 899.3	3,100	2.350	PL /5-/61. PW 1933.
			FCR	11.4	899.3	894.0	2,350	1,960	
Tionesta Lk	PA Forest	Tionesta Cr	ш	125.6	1,170.0	1,085.0	2,770	480	PL 74–738. PL 75–761.
I om Jenkins Dam, Burr Oak, Lk	OH Athens	E Br Sandy Cr	FRM RRM	7.6	7210	721.0	1,192	964 4 4 6 6 4	FCA 1944. Pl 78–534
Tygart Lake	WV Taylor	Tygart R	ш.	178.1	1,167.0	1,094.0	3,430	1,740	PWA 1934.
	•		FMACR	6.66	1,094.0	1,010.0	1,740	620	
Union City Res	PA Erie	French Cr	<u>ш</u> :	47.6	1,278.0	1,210.0	2,290	0	PL 87–874.
Uniontown L&D	KY Union	Ohio R	z	0.0	342.0	324.0	0	0	RHA 1909.
W FK of Mill Cr Winton Woods Lk	OH Hamilton	W Fk Mill Cr	ш	9.6	702.0	675.0	222	183	PL 79–526.
Willow Island L&D	WV Pleasants	Ohio R	z	0.0	602.0	582.0	0	0	RHA 1909.
	OH Washington								
Wills Cr Lk	OH Coshockton Wills Cr,		L	190.0	779.0	742.0	11,450	006	PW 1933.
	Muskingum.		0	c	0	c	C	c	
Winfield I & D	W// Pitpam	Z dweday B adweday	Z Z	0.0	0.0	238.0	0 0	00	RHA 1035
Wolf Cr Dam, Lk Cumberland	KY Russell	Cumberland R	· a	2,142.0	723.0	673.0	50,250	35,820	
			ш	2,094.0	760.0	723.0	63,530	50,250	PL 75–761.
Woodcock Cr Lk	PA Crawford	Woodcock Cr	L	15.0	1,209.0	1,181.0	775	325	
			FCAR	2.0	1,181.0	1,162.5	325	100	
Youghiogheny R Lk	PA Fayette	Youghiogheny R	F FCAR	99.5	1,470.0	1,439.0	3,570	2,840	FCA 1938.
		South Atlantic Division	ic Division	•	•	-	-		
Aberdeen L&D and Res	MS Monroe	Tombigbee R	z	3.9	190.5	189.5	4,359	3,883	PL 79–525.
Aliceville Lock Dam & Res	AL Pickens	Tombigbee R	z	7.6	136.5	135.5	8,655	7,945	PL 79–525.
Allatoona Dam & Res	GA Bartow	Etowah R	L i	302.6	860.0	840.0	19,201	11,862	PL 77–228.
C C	0		PMAK	284.6	840.0	800.0	11,862	3,251	
B Everett Jordan Dam & LK	NC Chatham	Паw К	FMCAR	140.4	240.0	202.0	13 942	13,942	PL 88–253.
Bay Springs Lock Dam & Res	MS Tishomingo	Tombigbee R	ž	37.0	414.0	408.0	6,700	5,740	PL 79–525.
Buford Dam Lk, Sidney Lanier	GA Forsyth, Ğwinnett	Chattahoochee R	ш	598.8	1,085.0	1,071.0	47,182	38,542	PL 79-14.
			PNMR	1,087.6	1,071.0	1,035.0	38,542	22,442	
Carters Dam & Res	GA Murray	Coosawattee R	L C	89.2	1,099.0	1,074.0	3,880	3,275	PL 79–14.
	No.	0	Į Į	4. 4	0.4.0	0.220,1	3,273	2, 130	DI 70 14
0	GA Columbia	Savannah R	Z 1L	390.0	335.0	330.0	78.500	71,100	
	SC McCormick		단	1,045.0	330.0	312.0	71,100	45,000	
Coffeeville Lock Dam & Res	AL Clark, Choctaw	Tombigbee R	z	19.9	32.5	30.0	8,500	7,500	
Columbus Lock Dam & Res	MS Lowndes	Tombigbee R	z	8.5	163.5	162.5	9,400	8,500	
Demopolis Lock Dam & Res	AL Sumter, Marengo	፠	Zι	0.0	73.0	73.0	10,000	10,000	PL 60–317.
Falls Dam & LK	NC Wake	Neuse K	FMCAR	89.7	264.0	250.1	11,310	2,600	

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

Č	č	Č	Project pur-	Storage	Elev limits feet M.S.L.	its feet	Area ir	Area in acres	0 1 17 17
רטשנים ומושי	State/county	016681	pose 2	AF.	Upper	Lower	Upper	Lower	Salbai IIIN
G W Andrews L&D and Res	AL Houston	Chattahoochee R	z	8.2	102.0	0.96	1,540	1,190	PL 79–14.
Gainesville L&D and Res	AL Sumter, Greene	Tombigbee R	z	5.8	109.5	108.5	6,920	5,900	PL 79–525.
Hartwell Dam & Lk	GA Hart	Savannah R	ш	293.0	0.599	0.099	61,400	55,950	PL 81–516.
	SC Anderson		F	1,416.0	0.099	625.0	55,950	27,650	
Holt Lock Dam & Res	AL Tuscaloosa	Black-Warrior R	₽	3.3	187.0	186.0	3,296	3,252	
Inglis Dam Lk Rousseau	FL Levy, Marion, Citrus	Cross FL Barge Canal	z	13.0	27.5	24.0	4,030	2,040	PL 77-675.
Jim Woodruf L&D	FL Gadsden, Jackson	Apalachicola R	₽	20.0	77.5	76.5	38,850	36,000	PL 79–14.
John H Kerr Dam & Res	VA Mecklenburg	Roanoke R	ш	1,281.4	320.0	300.0	83,200	48,900	
	)		FP	1,027.0	300.0	268.0	48,900	19,700	
John Hollis Bankhead L&D and Res	AL Tuscaloosa	Black-Warrior R	₽	27.1	255.0	252.0	9,245	8,730	PL 60-168.
Lk Okeechobee	FL Okeechobee, Glades,	Central and Southern FL	FNIMC	2,859.0	17.5	10.5	454,900	326,000	PL 71–520, PL 75–392,
	Hendry, Palm Beach, Martin.								PL 79-14, PL 80-858, PL 83-780, PL 90.
Lock A	MS Monroe	Tombigbee R	z	6.0	220.5	219.5	086	850	PL 79–525.
Lock B	MS Monroe	Tombigbee R	z	2.7	245.5	244.5	2,841	2,615	PL 79–525.
Lock C	MS Itawamba	Tombigbee R	z	1.6	270.5	269.5	1,699	1,586	PL 79–525.
Lock D	MS Itawamba	Tombigbee R	z	2.0	300.5	299.5	2,021	1,959	
Lock E	MS Itawamba, Prentiss	Tombigbee R	z	6.0	330.5	329.5	888	821	PL 79–525.
Millers Ferry L&D	AL Wilcox	Alabama R	₽	16.7	80.0	79.0	17,201	16,160	PL 79–14.
Okatibbee Dam & Res	MS Lauderdale	Okatibbee Cr	L	46.5	352.0	343.0	6,580	3,800	PL 87-874.
		Chickasawbay R	RMA	34.3	343.0	328.0	3,800	1,275	
Philpott Dam & Lk	VA Henry	Smith R	шĺ	34.2	985.0	974.0	3,370	2,880	PL 78–534.
	i i		<u>.</u>	111.2	974.0	920.0	2,880	1,350	
K B Kussell Dam and Lk	GA Elbert	Savannah R	T 6	140.0	480.0	475.0	29,340	26,653	PL 89-789.
Robert F Henry Lock Dam & Res	Al Autaina Lowndes	Alahama R	1 9	44.6	125.0	124.0	13 300	10 470	PI 79-14
Rodman Dam & Lk Ocklawaha	FL Putman & Marion	Cross FL Barge Canal	z	48.0	23.2	20.0	17,350	12,950	
S-10 & Water Cons Area 1	FL Palm Beach	Central and Southern FL	ш	181.9	18.3	17.0	141,250	141,250	
			FIMC	273.2	17.0	14.0	141,250	26,00	
S-11 & Water Cons Area 2A	FL Palm Beach Broward	Central and Southern FL	L	236.3	16.6	14.5	110,500	110,500	PL 80-858.
			FIMC	165.0	14.5	13.0	110,500	107,500	PL 83-780.
S-12 & Water Cons Area 3A	FL Broward & Dade	Central and Southern FL	ı.	1,661.0	14.5	10.5	487,200	385,000	PL 80-858.
			FIMC	465.0	10.5	9.2	385,000	316,000	
Selden Lock and Res		Black-Warrior R	Zι	9.1	95.5	94.0	8,200		
W Kerr Scott Dam & Res	NC Wilkes	Yadkın K		112.0	1,075.0	1,030.0	4,000	Ĺ.	PL /9-526.
			Σ	33.0	1,030.0	1,000.0	1,475	675	
Walter F George L&D	GA Clay	Chattahoochee R	<u>a</u>	244.0	190.0	184.0	45,181	36,375	PL 81–516.
Wood Doint Dom 8 Doo	7 - 16 mg	0 0000000000000000000000000000000000000	OVENCIA	4 900	0 100	000	7 90 90	7 17 27 2	07 074
West Follit Dall & Res	A Tiscalossa	Black Warrior R	Y Y L Z	2000	122.0	122 9	790,02		FL 6/-6/4. PI 60-317
יייי פשיו וואסי בשל מוט ווסס	AL IdecalOdea	Black Wallor in	_	>	5.4.0	0.77	3	20	7 L 60-317.

	1,235.0 1,174.0 13,307 7,045 PL 78–534. 473.5 344.0 266 0 PL 78–534. 473.5 978.0 178–534.	559.0 1,785 1,482 466.0 1.785 484	266.0	737.5 1,922 1,740	451.1 3,600 2,6	451.1 291.0 2,600 500 156.5 120.0 4,107 0 PL 78–534.		990.0 781 0	540.0 485.8 1,567 811 PL 87–874.	2,470.0 11,454 26	1,253.7 40 0		5,420.0 300 0	2,988.0 1,978 0	666.2 4,333 2,		547.0	5,604.0 254 0	565.5 5,956 0	460.0 6,630	145 0	421.0 1,084 0	710.0 668.0 1,333 0 FCA 1936.	570.0 1.913 276	2.056.0	184.0 2,411 0	-		6,060.0 4,120 0 71.1 16,423 0	537.5 8,980 3,28 478.6 3,280
_	1,046.2 1,23 7.7 41 137.1 47		6.8 30			225.0 45 52.0 15	0.8	_	65.0 54 85.0 54	7	_	15.0 439.5		n	165.0 71			2					75.0		_	34.9			191.3 6,22 200.8 11	
South Pacific Division	Bill Williams R F Sbar Cr F Story Cr FI		Burns Cr	East Fork, Russian R	Dry Cr	Littlejohn Cr F	Fullerton Cr	Tujunga Wash		Kern R	Pocoima Wash	Mariposa Cr	Mathews Canvon	_	Calaveras R	2	Owerls Cr		Kings R	Santa Ana R F	San Antonio Cr	San Gabriel R	Los Angeles R F	Kawaah R	Oueen Cr		Southwestern Division	Rio Chama	Buffalo Bavou	Aquilla Cr
	AZ Mohave, Yuma		CA Merced		& Channel CA Sonoma	CA San Joaquin,	Stanislaus. CA Orange	_	CA Madera			CA Mariposa	Res NV Lincoln	CA San Bernardino	CA Calaveras				_		_	_	CA LOS Angeles	_		s CA Los Angeles		NM Rio Arriba		
	Alamo Dam & Lk Bear Dam Black Butle Lk Rrea Dam & Ree	Buchanan Dam H.V. Eastman Lk	Burns Dam Res	Coyote Valley Dam Lk Mendocino	Dry Cr (Warm Springs) Lk &	Farmington Dam	Fullerton Dam & Res	Hansen Dam Res	Hidden Dam Hensley Lk	Isabella Lk	Lopez Dam Res		Mathews Canvon Dam & Re		New Hogan Lk		Deinfed Doc Dom & Doc	Pine Canyon Dam & Res	Pine Flat Lk Kings R	Prado Dam & Res	San Antonio Dam & Res	Santa Fe Dam & Res	Sepolveda Dam & Res		Whitlow Ranch Dam & Res	Whittler Marrows Dam & Res		Abiquiu Dam	Addicks Res	Aquilla Lk

APPENDIX E TO § 222.5—LIST OF PROJECTS—Continued

	APPE	APPENDIX E TO §222.5—LIST OF PROJECTS—Continued	OF PROJECT	s—Contir	pen				
Lower socion	Otorioo/otoro	Otroom 1	Project pur-	Storage	Elev limits feet M.S.L.	its feet .L.	Area in acres	acres	Att Posice
	State/County	Olegili .	pose 2	AF AF	Upper	Lower	Upper	Lower	selfar link
Arcadia Lk	OK Oklahoma	Deep Fork R	F	64.4	1,029.5	1,006.0	3,820	1,820	PL 91–611.
B A Steinhagen Lk	TX Taylor, Jasper	Neches R	Ĺ	24.5	83.0	81.0	13,700	10,950	
Bardwell Lk	TX Ellis	Waxahachie Cr	LL.	9.62	439.0	421.0	6,040	3,570	PL 86–399.
Barker Res	TX Harris Ft Bend	Buffalo Bayou	∑ ц	209.0	421.0	372.6	3,570	00	HD250-83-2 RHA 1938
Beaver Lk	AR Carrol, Benton,	White R	. ш	299.6	1,130.0	1,120.0	31,700	28,220	
	washington.		FPM	925.1	1,120.0	1,077.0	28,220	15,540	PL 85–500.
Belton Lk	TX Bell	Leon R	щ	640.0	631.0	594.0	23,600	12,400	
Benbrook Lk	TX Tarrant, Parker	Clear Fk Trinity R	Ēц	170.4	724.0	694.0	7,630	3,770	
			ΣZ	72.5	694.0	0.959	3,770	730	
Big Hill LK	KN Labette	Big HIII Cr	THE CONTRACT OF THE CONTRACT O	13.1	867.5	858.0	1,520	1,240	PL 87–874. HD572–87–2
Birch ⊔k	OK Osage	Birch Cr	í L	39.0	774.0	750.5	2,340	1.140	
			FMCAR	15.8	750.5	730.0	1,140	384	
Blue Mountain Lk	AR Yell, Logan	Petit Jean R	L	233.3	419.0	384.0	11,000	2,910	
Broken Bow Lk	OK McCurtain	Mountain Fk R	F	450.2	627.5	599.5	18,000	14,200	PL 85–500.
Shoot N	AR Baxter Marion	White B	T T T T	2.804.0	588.5	654.0	71 240	9,200	PI 77_228
במספה בא	Boone.		-	2,000,7	5	2	2,-	5	
	MO Ozark, Taney		F	1,003.0	654.0	628.5	45,440	33,800	
Canton Lk	OK Blain	N Canadian R	L L	265.8	1,638.0	1,615.4	15,710	7,910	PL 75–761. HD56–/75–3
Canvon Lk	TX Comal	Guadalupe R	ш	346.4	934.0	0.606	12,890	8.240	
			Σ	366.4	0.606	75.0	8,240	0	
Clearwater Lk	MO Reynolds, Wayne	Black R	LL 1	391.8	567.0	494.0	10,400	1,630	PL 75–761.
	Los Alamos.	NO GIAITICA	<u> </u>	0.5	5,460.5	0.000,0	0,6	1,200	
			FRC	43.0	5,356.6	5,330.0	1,200	0	
Conchas Lk	NM San Miguel	Candian R	шī	198.8	4,218.0	4,201.0	13,664	9,692	HD 308–74.
7	OK Washington	Capax B	<u>.</u>	184.3	732.0	710.0	13,380	3,000	DI 87-874
	KS Chautaugua		FMCA	42.8	710.0	687.5	4,850	110	
Council Grove Lk	KS Morris	Neosho R	L	63.8	1,289.0	1,274.0	5,400	3,230	
			FMAR	48.5	1,274.0	1,240.0	3,230	45	
DeQueen Lk	AR Sevier	Rolling Fork R	FMCBO	101.3	473.5	437.0	4,050	1,680	PL 85–500.
Dierks Lk	AR Sevier, Howard	Saline R	) () ()	67.1	557.5	526.0	2,970	1,360	PL 85-500.
			FMCR	12.1	526.0	512.0	1,360	810	
Eldorado Lk	KS Butler	Walnut R	T UNIVERSITY	79.2	1,347.5	1,339.0	10,740	8,000	PL 89–298.
Elk City Lk	KS Montgomery	EK R	Z Z	239.5	825.0	796.0	13,150	420	

79–525.	07	HD440-76-1.	FEC 1941.	RHA 1946.	PL 74–738.	86_645	PI 87–874	HD 591–82–2.	PL 85-500.		87–874.	103-77-1	:	PL 74–738.	75-761	PL 83–780.	79–526.	27 220	11-220.	PL 79–526.		PL 74-738.	84–843.	PL 80-858	PL 81-516.		PL 74–738.	0.77	PL 01-516.	PI 87-874		PL 81–516.		758-79, RHA 1946.	HD 758-79, RHA 1946.	758-79, RHA 1946.	758–79, RHA 1946.	HD 758-79, KHA 1946.	HD 758–79.
64 PL 79–525.	46,120	2,350 1,170	19,900 FEC	_	1,820 PL	000	1 310 PI			310	4,400 PL 87–874.	7.280 HD103-77-1	14	8,693 PL	31 460 PI	23,740 PL	917 PL	394		13.250 PL	4,500	3,570 PL	0 P	1,370 PL	7.470 PL	10	11,655 PL	0 000	9,300 108		5.590			140 HD	9,400 HD	3,180 HD	5,200 HD		4,130 HD
4,450	105,480	2.350	51,000	19,100	2,690	1,820	2,000	1,310	4,680	1,370	11,040	12,710	7,380	27,730	8,690	31,460	3,700	917	1,260	34,490	13,250		3,570		10.940	7,470	17,630	11,655	0,100	38,000	17.040	54,300	23,600	140	10,700	3,750	5,820	6,900	4.830
764.0 585.0	565.0	948.5	554.0	551.0	2,004.0	1,988.0	791.0	0.669	502.0	464.5	504.0	535.0	451.0	1,125.0	1,115.0	435.0	761.5	55.5				733.0	710.0	5,196.1	522.0	456.0	3,851.0	0.0	1,039.0	1 010 0	978.0	723.0	706.0	142.0	160.5	180.0	194.0	211.0	229.0
796.0	585.0	987.5	582.0	554.0	2,028.0	2,004.0		791.0			528.0									437.5			733.0	5,232.0			0				1.010.0				162.3	182.3	196.3	213.3	231.3
44.8	1,463.0	15.0	919.2	53.9	86.8	79.8	1 0	29.2	188.7	29.3	162.2	243.1	154.3	240.0	31.4	716.5	48.4	3.8	7.0	809.1	127.2	257.9	31.1	73.0	1.238.0	176.9	270.3	350.9	208.0	0107	343.5	1.180.0	296.7	0.0	18.7	8.3	12.9	14.4	9.6
FMA F	FNPM	⊥ ∐	ш	F 1	цį	Σ μ	. ц	MC	ш	FMCQ	μZ	- Ε	. ∑	L i	Σu	. <u>L</u>	ш	Σu	L 2	≅ ⊯	FMCAR	LL.	FMA	ட	Ш	Σ	L I	FRC	FMAR	Ž	FMARC		FNPMC	z	z	z	zi	z	z
Candian R		Ta≣ ⊼	Neosho (Grand) R		Wolf Cr	Galisteo Cr			Cossatot R		San Gabriel R	Denton Cr		Salt Fk	Arkansas K		Polecat Cr	2	Tolds Cf	Kiamichi R		Caney R		Jemez R	Mountain Cr		Arkansas R	4	Neosno R	Arkansas R	AINGELSGGS IN	Arkansas R		Arkansas Post Canal	Arkansas R	Arkansas R	Arkansas R	Arkansas K	Arkansas R
OK McIntosh, Pittsburg, Haskell.		KS Greenwood	OK Wagoner		OK Woodward	NM Santa Fe	TX Williamson		AR Howard, Polk		TX Williamson	TX Denton Tarrant		OK Alfalfa	AR Clahuma Van Buran		OK Creek	> > > +	I > Coleman	OK Choctaw		OK Osage	KS Chautaugua	NM Sandoval	TX Dalla, Ellis, Tarrant		CO Bent	2000	No collee	OK Kay Osade	KS Cowley	OK Tulsa		AR Arkansas	AR Desha, Arkansas	AR Jefferson, Lincoln	AR Jefferson	AR Jefferson	AR Pulaski
Eufaula Lk		-all Kiver LK	Fort Gibson Lk		-ort Supply Lk	Salisteo Dam	George Dani		Gillham Lk		Granger Lk	Granevine 1 k	)	Great Salt Plains Lk	200 day		Heyburn Lk	C		Hugo Lk		Hulah Lk		Jemez Canyon Dam	loe Pool I k		John Martin Res	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	John Redinond Dam & Res	A - we y		Kevstone Lk		¿D 01, Norrell	L&D 02, Wilbur D. Mills Dam	-&D 03	L&D 04	:	L&D 06, David D. Terry

APPENDIX E TO §222.5—LIST OF PROJECTS—Continued

6	Č	č		Storage	Elev limits feet M.S.L.	ts feet	Area in acres	acres	
Project name	State/county	Stream	pose 2	7,000 AF	Upper	Lower	Upper	Lower	Auth legis 3
L&D 08, Toad Suck FerryL&D 09, Arthur V. Ormond L&D, W.	AR Faulkner, Perry AR Conway	Arkansas RArkansas R	zz	8.7 15.8	265.3 287.0	263.0	4,130	3,600	RHA 1946. HD 758–79.
Rockereller LK. L&D 10, Lk Dardanelle	AR Pope Yell	Arkansas R	₽	72.3	338.2	336.0	34,700	31,140	
L&D 11, Ozark-Jetta Taylor	AR Franklin	Arkansas	NPR:	25.3	372.5	370.0	11,100	8,800	
L&D 13, James W. Trimble	AR Sebastian, Crawford	Arkansas R	z	18.1	392.0	389.0	6,820	5,200	RHA 1946.
L&D 14, W. D. Mayo	OK Sequoyan, Letlore	Arkansas K	z 2	0.0	413.0	0.0	1,600	0 0	PL /9-525.
L&D 13, Robert 3. Neir Res	OK Lellore, Sequoyan	Arkansas R	¥ 9	20.7	460.0	458.0	43,800	40,760	PL /9-525. DI 70 626
L&D 17, Chouteau	OK Wagoner	Verdigris R	Żz	0.0	511.0	511.0	2,270	2,270	PL 79-525, HD 758-79-
1 &D 18 Newt Graham	OK Wadoner	Verdioris R	z	0	532.0	532.0	1 490	1 490	2. PI 97–525
Lake O' The Pines	TX Marion	Cypress Cr	· L	579.5	249.5	228.5	38,200	18,700	PL 79–526.
		•	Σ	250.0	228.5	201.0	18,700	1,100	
Lavon Lk	TX Collin	East Fork, Trinity R	ш:	275.6	503.5	492.0	29,450	21,400	HD 533-78-2.
##   OE20 O A   Ollivoimo	Y Donates	0 / i i i i i i i i i i i i i i i i i i	≥ ⊔	380.0	492.0	433.0	20,400	78,7	HP 403 77 1
Lewisville LK Galza-Little Ellii Daiii	LA Dellion		LΣ	436.0	515.0	433.0	23,280	12	
Marion Lk	KS Marion	Cottonwood R	ш	60.2	1,358.5	1,350.5	9,050	6,200	PL 81–516.
			FMAR	83.3	1,350.5	1,320.0	6,200	170	
Millwood Lk	AR Little R Hempstead	Little R	ட	1,650.0	287.0	259.2	95,200	29,200	PL 79-526.
			L E	153.3	259.2	252.0	29,200	13,100	HD 785–79.
Navarro Mills LK	IX Navarro Hill	Richland Cr	⊥ ≥	143.2	443.0	424.5	11,700	5,070	HD 498-83-2.
y I posmiN	AR Perry Yell	Fourthe La Fave R	<u> </u>	307.0	373.0	342.0	18,300	3.550	FCA 1938
Norfork Lk	AR Baxter, Fulton	North Fork R	. LL	731.8	580.0	552.0	30,700	21,990	
	MO Ozark		댐	707.0	552.0	510.0	21,990	12,320	FCA 1941
North Fork Lk	TX Williamson	N.F. San Gabriel R	L	97.8	834.0	791.0	3,220	1,310	
:			MC	29.2	791.0	0.669	1,310	0	HD 591-82-2.
O. C. Fisher Lk	TX Tom Green	N. Concho R	ш 2	277.2	1,938.5	1,908.0	12,700	5,440	PL 77–228.
Oplogab I k	OK Roders	Verdiaris R	Σ μ.	965.6	661.0	638.0	56.800	29.460	PI 75-761
1 1 3 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	)	2	L N N	544.1	638.0	592.0	29,460	1,120	:
Optima Lk	OK Texas	N. Candian R	ш	100.5	2,779.0	2,763.5	7,640	5,340	PL 74-738.
		-	FMRC	117.7	2,763.5	2,726.0	5,340	1,335	
Pat Mayse Lk	TX Lamar	Sanders Cr	T I	64.6	460.5	451.0	7,680	5,993	PL 87–874.
i c	N McCurtain	Q <u>\( \frac{1}{2} \) </u>	۲ کا کا		0.104	74.0.0	2,882	080	D 86-71.
DD	ON INCOMEDIA		FMAC	77.6	443.5	414.0	4,980	7002	FE 63-500. HD 170-85-1.
Proctor Lk	TX Comanche	Leon R	ш	310.1	1,197.0	1,162.0	14,010	4,610	PL 83-780, HD 535-81-
Sam Rayburn Res	TX Jasper, San Augus-	Angelina R	ш	1,099.4	173.0	164.4	142,700	114,500	2. HD 981–76–1.
	tine, Angelina.		CMG	1 446 2	164 4	149.0	149 0 114 500	74 040	
-	_	-	-	1.044,	- - - - -	5	500,		

Santa Rosa		NM Guadalupe   Pecos R	ш	340.0	4,746.2			3,823	PL 83-780.
			<u> </u>	160.0	4,776.5	4,746.2	7,115	3,823	3,823
Sardis	OK Pushmatah	OK Pushmatah Jackfork Cr	ш	122.6	0.709		16,960	13,610	13,610 HD 602-79-2.
			FMR	274.2	299.0	542.0	13,610	4	
Somerville Lk	TX Washington, Lee, Burleson.	Yegua Cr	L	337.7	258.0	238.0	24,400	11,460	11,460 PL 83–780.
			Σ	143.9	238.0	200.0	11,460	0	
Stiatook	OK Osage	Hominy Cr	ш	178.0	729.0	714.0	13,690	10,190	10,190 HD 563-87.
			FMARC	311.6	714.0	657.0	10,190	1,430	
Stillhouse H. Lk	TX Bell	Lampasas R	ш	330.6	0.999	622.0	11,830	6,430	6,430 PL 83-780.
			Σ	204.9	622.0	498.0	6,430	0	
Table Rock Lk	MO Taney, Stone, Barry	White R	L	0.097	931.0	915.0	52,250	43,070	PL 77-228.
	AR Carroll, Boone		FP	1,181.50	915.0	881.0	43,070	27,300 F	FCA 1938.
Tenkiller Ferry Lk	OK Cherokee, Sequoyah	Illinois R	L	2.929	0.799	632.0	20,800	12,900	RHA 1946.
			FP	371.0	632.0	594.5	12,900	7,370	
Texoma Lk, Denison Dam	TX Marshall	Red R	ш	2,669.0	640.0	617.0	144,000	88,000	PL 75-761.
	OK Bryan, Cook, Gray-		FPM	1,612.0	617.0	290.0	88,000	41,000	
	son.								
Toronto Lk	KS Woodson	Verdigris R	L	179.8	931.0	901.5	11,740	2,660	2,660 HD 440-76-1.
			FMA	10.7	901.5	896.7	2,660	1,720	
Trinidad Lk	CO Las Animas	Purgatorie R	L	28.0	6,260.0	6,230.0	2,107	1,453	PL 85-500.
			Œ	20.0	6,230.0	0.0	1,453	0	
Two Rivers Dam	NM Chaves	Rio Hondo R	L	150.0	4,032.0	3,945.0	4,806	0	PL 83-780.
Waco Lk	TX Mclennan	Bosque R	L	3.3	200.0	455.0	19,440	7,270	7,270 PL 83-780.
			Σ	100.8	455.0	370.0	7,240	0	HD 535-81-2.
Waurika Lk	OK Jefferson	Beaver Cr	L	140.4	962.5	951.4	15,000	10,100	10,100 PL 88-253.
			FMCAR	199.7	951.4	910.0	10,100	830	
Whitney Lk	TX Hill, Bosquel	Brazos R	L	1,372.0	571.0	533.0	49,820	23,560	23,560   PL 77–228.
			PM	381.9	533.0	425.0	23,560	475	HD 390-76-1.
Wister Lk	OK Leflore	Pouteau R	L	387.0	502.5	474.6	23,070	2,000	5,000   PL 75-761.
Wright Patman Lk	TX Bowie, Cass	Sulphur R	L	2,363.7	259.5	220.0	119,700	20,300	20,300   PL 79-526.
			ΜH	142.7	220.0	180.0	20,300	0	

<sup>1</sup>Res—Reservoir; Lk—Lake; Div—Diversion: R—River; Cr—Creek; Fk—Fork; L&D—Lock & Dam; GIWW—Gulf Intercoastal Waterway; FG—Floodgate; CS—Control Structure: DS—Drain-age Structure; PS—Pump Station.

<sup>2</sup>F—Flood Control; N—Navigation; P—Hydropower; I—Irrigation; M—Municipal and/or Industrial Water/Supply; C—Fish and Wildlife Conservation; R—Recreation; A—Low Flow Augnentation or Platement; G—Duality or Silt Control.

<sup>3</sup>P—Public Law; HD—House Document; RHA—River & Harbor Act; PW—Public Works; FCA—Flood Control Act; WSA—Water Supply Act.

47 FR 44544, Oct. 8, 1982, as amended at 52 FR 15804, Apr. 30, 1987; 52 FR 23816, June 25, 1987; 57 FR 35757, Aug. 11, 1992. Redesignated at 60 FR 19851, Apr. 21, 1995]